

*Lineaments
of a Critique of Civilization, or
Introduction to the Reading of
Marx's Capital*

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Coda (Nov 2020, Mar 2021)

Each of the three volumes of Capital has the subtitle, A Critique of Political Economy. This is not happenstance. In contrast to the narrow sense of critique (immanent criticism) appearing in our table of contents, critique is theory, but it is neither philosophy nor science. Yet Marx, having never fully worked out the implications of this unique form of theorizing, was often and unknowingly sandwiched between the two. For better and more often than not for worse, it was left to those who after him assumed a revolutionary stance vis-a-vis capital to pursue and elaborate a coherent position. In this respect this singular shortcoming requires we adopt a critical perspective on his work (in particular to the simple fact that it unknowingly aims at a critique of civilization and simultaneously conceals this critique), and on all those who follow him in failing to recognize the distinction - it weighs heavily on the inability to grasp the necessary of the immediate abolition of the state as such together with a total institutional transformation of society and our metabolic relation to the nature in which we are embedded. We shall say more on this later...

Critique arises as a reflection on and theorization of a real movement (revolutionary proletarian upsurges) whose objective compulsion rooted in the crisis of capital propels it to sweep away existing society. In this sense, it is a reflection on the structure and organization of capitalism, of the movement and logic of capital, and mediation of that practice which exhausts itself in the completed supercession of capitalism, which has become synonymous with civilization itself. Thus, in the fullest and deepest sense those categories it elaborates are social and historical, concepts that even when they reach back to our relation to nature and its presuppositions remain bound up with a practice of changing the world. Those concepts are and remain workers' ideas, concepts and theories ...motivated by the desire not to be under thumb of a boss and to be masters of our work and activity, the need for solidarity in work and community, a respect for living beings and the nature which encompasses us all... They are products of a long history of working class activity, even if at any particular moment any given group of workers fails to recognize this, even if the particular moment extends to an entire "era" in the history of capitalism, even if any given group of workers encompasses large layers of the working class in a specific national sector of the global system of social relation,¹ and even if this critique now reaches beyond capital to the very concept and reality of civilization itself...

While most revolutionaries see science as the intellectual patrimony of humanity and, thus, believe that a free society the other side of a revolutionary transformation will find itself heir to it, in both cases the assessment rests on productivist assumptions. Science is a class form, unrecognizable as such since it has become generalized, pervasive, effective rationality in a world that is fully capitalist. A world that has been revolutionized will be one in which science is wholly superceded, for if a free society (communism) is possible, then necessarily it will find practical and intellectual expressions in a radical departure from the vision of the world that underlies the modern science of nature and the civilization which embraces it, and, in so doing, will establish a cognitive relation to nature and an ensemble of technics through which we negotiate this relation which are no longer separate, specialized knowledges and practices but are fully, consciously and freely integrated into daily life...

¹While history does not rescript itself by repeating event for event, past and a given contemporaneity may be structurally similar; yet even as a precise historical analog, engendered by a unique constellation of historical developments,* it may be that the revolutionary transcendence of capital based on the industrial proletariat in the capitalist metropolis is a societal phenomenon of the past. And if a proletariat reemerges as a historical class, it may well also be that confronting ongoing ecological collapse, mass species extinction and a planetary transformation of climate, revolutionary change notwithstanding reconstructing coherent social life will be impossible.**

* These included the massive rationalization of the capitalist economy produced by rapid industrialization, an enormous influx of precapitalist, immigrant social groups into the capitalist social order in the form of a mass of unskilled wage laborers whose peasant pasts made the contrasting capitalist social milieu ultimately unbearable and intolerable, the elaboration of a project of conciliar-based, workers' control by a small stratum of objectively strategic, highly literate, and skilled workers undergoing the subjectively radicalizing experience of dilution, an extraordinarily crisis in the structure and dynamics of the capitalist system created by a world war - itself the product of inter-imperialist rivalries, and the constitution of a truly revolutionary proletarian political organization.

** See the concluding paragraphs of "Class Struggle and the Drift toward Renewed Imperialist World War," and the *Coda*, both below.

Based on the (second) *Marx-Engels Gesamtausgabe*, specifically II. Abteilung (*Das Kapital und Vorarbeiten*) launched in 1975 and published by Dietz Verlag, Walter de Gruyter and Akademie Verlag all in Berlin, the following works and manuscripts of Marx have been used in the study below:

- I/11 *Werke, Artikel, Entwürfe, Juli 1851 bis Dezember 1852*. Berlin, 1985
- I/22 *Werke, Artike, Entwürfe. März bis Novemer 1871 (The Civil War in France)*. Berlin, 1978
- II/1 *Ökonomische Manuskripte, 1857/58 (Grundrisse der Kritik der politischen Ökonomie)*. Teil 1. Berlin, 1976
- II/1 *Ökonomische Manuskripte, 1857/58 (Grundrisse der Kritik der politischen Ökonomie)*. Teil 2. Berlin, 1981
- II/2 *Ökonomische Manuskripte, 1858-1861 (Zur Kritik der politischen Ökonomie u. a.)*. Berlin, 1980
- II/4.1 *Ökonomische Manuskripte 1863–1867. Teil 1. (Sechstes Kapitel. Resultate des unmittelbaren Produktionsprozesses, „Kapital“ Zweites Buch, und Vortrag, „Value, Pprice and Profit“)*. Berlin, 1988
- II/4.2 *Ökonomische Manuskripte 1863–1867. Teil 2. (Manuskript 1863/65 zum 3. Buch des „Kapital“)*. Berlin, 1992
- II/4.3 *Ökonomische Manuskripte 1863–1868. Teil 3. (Manuskripte 1867/68 zum 2. und 3. Buch des „Kapital“)*. Berlin 2012
- II/7 *Le Capital: Paris, 1872-1875*. Berlin, 1989
- II/10 *Das Kapital. Kritik der Politischen Ökonomie. Erster Band: Der Produktionsprozeß des Kapitals* (Hamburg 1890). Berlin, 1991
- II/11 *Manuskripte zum zweiten Buch des „Kapitals“ 1868 bis 1881*. Berlin, 2008
- II/13 *Das Kapital. Kritik der politischen Ökonomie. Zweiter Band: Der Zirkulationsprozeß des Kapitals*. Herausgegeben von Friedrich Engels (Hamburg 1885). Berlin, 2008
- II/15 *Das Kapital. Kritik der politischen Ökonomie. Dritter Band: Der Gesamtprozess der kapitalistischen Produktion*. Herausgegeben von Friedrich Engels (Hamburg 1894). Berlin, 2004

Marx-Engels Werke. Band XIX. Berlin (DDR), 1962²

Karl Marx / Friedrich Engels, *Manifest der kommunistischen Partei* (Februar 1848). „Vorrede“ zur russischen Ausgabe von 1882. Reclams Universal - Bibliothek. Stuttgart, 2017³

Archaic spelling, e.g., „Capital,“ „Waare,“ „Werthe,“ „Theil,“ „Thätigkeit,“ etc. have been modernized, e.g., „Kapital,“ „Ware,“ „Wert,“ „Teil,“ „Tätigkeit,“ etc. All translations from the German which appear in this study are our own.

For the sake of convenience, the author lists here two of his own works from which he frequently cites during the course of this study:

The Critique of Science: Historical, Materialist and Dialectical Studies on the Relation of the Modern Science of Nature to the Bourgeoisie and Capital. St. Paul, Fourth Revision/Fifth Edition, 2019

Origins and Endings: Human Genesis and Formation, Archaism and the State, Capital and Planetary Crisis. St. Paul, 2020*

²Scheduled to appear as part of *Abteilung I (Briefcase)*, the Marx-Engels Gesamtausgabe containing correspondence for 1881 has year to be published.

³Marx-Engels Gesamtausgabe I/6 *Werke, Artikel, Entwürfe*. Januar 1846 bis Februar 1848 (*Manifest der Kommunistischen Partei u. a.*) has yet to appear.

**Origins and Endings* consists in three major divisions, each originally written as a separate work: *The Materialist Dialectic: Why the Study of Human Origins is Necessary and Why it is Indispensable to the Critique of Science and Inseparably that of Capital* (2014); *Archaic Communities and the Origins of Agriculture* (2009, 2011); and *Capitalism and the Domination of Nature: Earthly Premises of All Living Existence, Capitalist Technology, the Modern Science of Nature and the Movement of Capital* (Fourth Revision/Fifth Edition, 2020).

Prologue
Historical Genesis and Formation of Capital

In no small measure, Marx's confusion of critique with science plays to a reading which, however tacitly, presumes a systemic inability to consistently elaborate an account of capital which possesses the characteristics of a system of categories which are simultaneously historical through and through (meaning the system is open-ended).

This opens the door to a sharp distinction between the first two volumes and the third, which rises in some cases to an epistemological break. For example, In his *Dialectical Economics*, Lyn Marcus describes the first and (most of the) second volume of Capital as a "closed 'model'" (somehow constituting an altogether inferior form of analysis) distinct from that of the third which functions on the basis of an "open 'model'" of capitalism. Marcus' interpretation of the overall "architecture" of *Capital* leads not just to this (epistemological) break between the first two volumes and the third, but to the assertion that, unmediated by expanded reproduction and with it the problems of the total social capital and the credit system, *Capital, I* is not "fully Marxist" but still "Ricardian."⁴ In Marcus' case at least, the break and the distinction lead straightaway to a reformist project of technologically rationalizing capitalism. Outwardly the three volumes do, in fact, exhibit a triplicate structure, which manifestly expresses the logic of capital, the inner organization of its movement. There is, however, no *actual* break; instead, the three volumes variously unfold that movement, highlighting the grand divisions it generates, accumulation (*Capital, I*), reproduction (*Capital, II*) and (surplus) distribution (*Capital, III*) as the analysis unfolds in the movement from the direct process of production of capital to the total social process of its reproduction.

There is, then, a better, albeit highly unorthodox (and, at least with regard to the now very old tradition of Marx interpretations, ironic)⁵ manner in which to read and really understand *Capital*, one that integrates *system and history*:

Marx begins with the commodity, something obvious and ubiquitously present, overwhelmingly simply there in its sheer givenness. He ends with the various classes in society (*III*, Chapter 52), an unfinished or unelaborated ending to be sure. The beginning and end are internally connected, first, by the categorically expressed forms of movement (the existential determinants of the mystified subject of society) that are traversed departing from the commodity and arriving with classes. This is emphatically not a "model," but taken together and as a whole, the ideally reproduced

⁴Lyn Marcus, *Dialectical Economics: An Introduction to Marxian Political Economy*. Lexington (MA), 1975: 303-304.

Similarly, Loren Goldner who follows Marcus closely in all respects with reference to *Capital*: "The theoretical discussion in Vols. I and II is a discussion of capital from the vantage point of a *single capitalist enterprise*. Put in another way, the whole discussion of Vols. I and II abstracts from the key concepts we will elaborate: *expanded* social reproduction, and thus the problem of the *total* capital and its mediation by the *credit* system. As with productive and unproductive labor, the entire discussion presupposes simple reproduction and the (individual) capital-in-itself. The whole discussion of value in Vols. I and II is therefore "Ricardian" and not fully Marxist. What is effectively Marxist is the problematic of expanded reproduction, the reproduction of the total capital and the completion of its circuit (*Kreislauf*) through the banking system as discussed in the fragments that make up Vol. III. Only a concept of value located in this dynamic is fully Marxist." *The Remaking of the American Working Class*. New York, 1999 (1981): Chapter 1a ("The Transition from Vols. 1 and to Vol. 3 of *Capital*"). Accessed online at *Break Their Haughty Power*.

To the contrary, the concept of value formulated in the opening chapter of *Capital* is precisely what is distinctively Marxist. It is not Ricardian. If we examine Ricardo's *Principles* (David Ricardo, *On the Principles of Political Economy and Taxation*. London, 3rd edition, 1821, accessible online at www.econlib.com) we'll find:

There is of the labor theory of value so-called in Ricardo is undeveloped.

While, there is a concept of labor as a quantity "in" commodities that distinguishes one from another, there is no concept of objectification, materialization and embodiment (because the *Hegelian framework in altogether foreign to British thought*, which is empiricist, not to mention Ricardo would have really, really have had to have been abreast of German idealist philosophy since Hegel was a contemporary of his. He obviously wasn't, and had he been asked he would have responded that Hegel is incoherent and incomprehensible).

While there is a tacit (barely visible) concept of socially necessary labor time, the specificity of abstract labor... generalized, quantified, objectified and materialized as emptied temporality (as socially necessary labor measured in units of objective time)... also cannot be found in Ricardo.

The very notion that abstract labor is a peculiar form of *activity* (i.e., as work under conditions of capitalist production) that produces value as it is embodied in commodities, *emphasis on activity*, is equally foreign to Ricardo.

The concept of commodity fetishism, of a world upside in which relations among men appear as things, would be entirely unintelligible to Ricardo. He, Ricardo, like a fish in water, moves in the reified element of daily life as his natural milieu: Ricardo does not discover simultaneously concealed and revealed by the movement of things, the "underlying" structure of social relations among men.

Summarily, there is no critical assessment of the dialectic of concrete and the abstract in production, and there is no possibility of comprehending capitalism as a system of social relations...

So, if the analysis of capital goes beyond production and includes circulation as a moment in the movement of capital, it is not merely "undialectical" to assert the primacy of the third volume vis-a-vis, or worse apart from, the first two, there is no comprehension of capital unless the "total capital" (i.e., volume III) is mediated, thus made concrete, on the basis of the whole course of the development of what we shall call the "mystified-mystifying" false subject, capital, as its real movement is ideally reproduced in those first two volumes.

⁵Above all, ironic in relation to those who proclaim the nonsense that Marx righted Hegel by putting the dialectic back on its feet.

concrete totality we call capitalism, the cognitive production of which is governed by the *telos* of revolutionary transformation.⁶ It is connected, second, by the formal manner of presentation that demands, paraphrasing Hegel, what is present concealed, undeveloped and abstract in the beginning must also be there, fully mediated hence concrete and actual, in the end.

Movement from commodity to classes is a description of the real movement of the mystified-mystifying subject of society, capital, an elucidation that lays bare the intelligible structure of the world (capitalism) as it takes shape and is formed on the basis of this subject's real movement: Capitalism necessarily appears as a system of social relations created through and formed by the movement of a subject without will and consciousness, a subjectivity-less, an autonomic subject, in which dead lords over *living labor* (Marx), products dominate producers, a mystified subject displaces the real, flesh and blood subjects... *This is the phenomenology of capital in the Hegelian sense...*

Yet the requirement here at this moment in the history of capitalism is to *comprehend* Marx's work in another way, in other words, what we shall do is to read *Capital* as a *phenomenology in the Husserlian sense*:

Those flesh and blood subjects (living labor) *never disappear(s)*. The movement of capital is contradictory not just because the creation of new forms drives its internal dialectic, but because this constitution, and the various new forms capital assumes in "resolving" its contradictions in the course of its movement and development, can always be traced back to the exploitation of those subjects (living labor) on which it depends: It *cannot* be renewed without continuous contact with living labor, by that continuing exploitation. In the broad societal, practical and immediate sense in all but revolutionary moments hidden, it underpins the whole course of capital's movement. Theoretically, though, in making explicit premises, underlying assumptions and, in this respect, the gaps in Marx's account we can make living labor visible. This is phenomenology in the Husserlian sense.⁷ Thus, much of *our* account is given over to making explicit premises, assumptions and, in this respect, lacunae in *his*, Marx's, account, which, in turn, on occasion requires lengthy explanatory footnotes. Some of this is polemical. It is not a detailed reading, and it fails to cover vast amounts of the material and analyses that Marx pursued;⁸ but it has the virtue of being more germane and adequate to the tasks of our era.

If here we cannot consistently pursue a phenomenology of capital in Hegel's sense, we can state what it intends: While the account which follows will only highlight a handful of nodal points in the involved, multifaceted conceptual analysis Marx developed, and is highly critical of those assumptions which careful examination discloses as elements of bourgeois theory, *Capital* traces out in an exceedingly elaborate, meticulously detailed and categorically complex fashion the structure that revolutionary awareness must achieve, even if this awareness is only implied and implicit: Beginning with the commodity, we come to understand it is a historically specific form of objectively practical activity, our concrete labor as groups of men and women in production, that homogenized and quantified, temporalized and objectified, is materialized in an objectively illusory movement as capital, that a struggle of contradictory class subjectivities generates, for us as one pole in this struggle, insight into the intelligible structure of this movement in its entirety, and that this very activity resolves itself into this struggle through which we reclaim (practically de-reify) its products as ours. In the end, in so doing we generate the insights and create the organizational forms in and through which we reorganize society in its totality, transcending the order of capital. As our account draws to a close, classes and class struggle will more and more prominently figure in it. In this sense more or less exclusively, we shall bring the Hegelian and Husserlian aspects of our account together...

In undertaking our labor of explication and elaboration, we are required to start from an account of the contours of the historical movement which constitutes the genesis of capital as capital (self-valorizing value), an account which will reveal distinct points at which Marx's analysis of antediluvian forms of capital are already burdened by the shortcoming of his materialist "science.."

The Formal Domination of Capital over Labor as an Epoch in the History of Capitalism

There are four historical premises of the initial appearance of capital as capital. In terms that are not ours, these were at once necessary *and sufficient* conditions for capital's constitution. In order of their appearance, they are elaboration of a legal concept of absolute, unconditional private property in movables (merchants' inventories) as well as in land; dispossession of peasants, stripping them of landed proprietorship and, at the same historical moment, formation of a class of waged laborers; and the creation of the modern science of nature mediating to the bourgeoisie

⁶The whole notion of a conceptual "model" is, at any rate, *contemplative and bourgeois*, relying on a reflection theory of consciousness in which more and more elaborate concepts provide us with closer and closer "approximations" to "reality" outside and other than us, the object itself. See *The Critique of Science*, Third Study, Part III, "Abstract Dialectic of Concepts," Part IV, "The Critique of Historicism" and Note, "The Relation of 'Laws' of Nature and Society to Consciousness."

⁷Fully consonant with Marx's living labor (the full meaning of it will only become clear in the course of this account), Husserl's term is *anonymously functioning subjectivity*.

⁸Why Marx is not facile reading, with some exceptions he is not difficult either. Where his presentation is complex, the passages in question perhaps even vexing (see, e.g., *Money, the Circulation of Commodities, and the Transformation of Money into Capital*), we have dwelt more extensively on them. Elsewhere we have merely summarily recounted the primary focus of his conceptual elaborations.

as bearer of capital a vision of man, nature and community. Formal domination preceded the appearance of capital as capital in what Marx called its "antediluvian" forms (usury and merchants' capital). In its *fully hegemonic* form it was *not* then, properly speaking, part of capitalist development in a rigorous sense. The temporal framework in which formal domination first emerged as it passed through multiple phases becoming increasingly dominant in the western and northwestern parts of the European continent was enormous, justifying in good measure its *epochal* character, though, importantly, growing hegemony was largely restricted to production, that is to a form of capitalist domination over labor in production. (As the following discussion will show, a reassessment of Marx's concept of the role of merchants and merchant's capital with a view to production will also be required.) In other words, the commodity form had yet become *universal*, capitalist domination did not (yet) extend to all social institutions, while formal domination did not even itself constitute a "mode of production" (which is, at any rate, *at best* moot since the mode of production in the strict sense is a historical category that not only forms with the *critique* of political economy, but first appears with capitalism. The rest is illicit retrospective projection.) The various, decisive forms of productive activity during this entire epoch are most adequately characterized in terms of a vast array of differing types of landlordism...

We can and should follow Marx in setting forth an *initial* determination of formal domination.⁹ While taking it as a point of departure, we may will modify it in the light of social and historical contents.

Initially, in the historical sense, the capitalist merely takes over an existing labor process (e.g., peasant or guild production) with the proviso, of course, that labor, while "free," is no longer independent (in those cases where it had been). In this sense, politically mediated personal relations of domination and dependency (as in the cases of slaves or serfs) disappear. In fact, though a new form of supremacy and subordination develops in the work process, at first it appears, on the basis of a "freely" engaged transaction between commodity "owners" (proprietors of means and instruments of labor, on the one side, and the capacity for labor, on the other), that domination and dependency have been dissolved into a purely financial relation. Based on the supervision and direction of the work process by the capitalist, this new form of supremacy exhibits its limits. It is restricted by the mere formal control the capitalist exercises over labor. Exploitation, the extraction of surplus-value, is achieved only by the greater continuity of production expressed in the lengthening of the working day, i.e., by increasing the quantity of commodities produced, without any corresponding compensation of labor. Increased production is at all possible because, unlike peasant production which is largely for self-sustenance or artisan production which depends upon the vagaries of a limited, personally acquired clientele, production now is for the market (a much enlarged base) and is driven by the capitalist desire to reduce labor costs to the socially necessary minimal time, a project which can only be achieved by expanding the quantity of commodities produced. The revolutionary character of this, albeit limited, capitalist takeover of the work process is visible in the fact that "the process of exploitation is stripped of every patriarchal, political or even religious cloak."¹⁰

The epoch that can be characterized by this first form of the domination of labor by capital, the formal subsumption of labor under capital (again, Marx), call it formal domination, is, then, determined by activity undertaken from outside the production process proper. No technological transformation or reorganization of that process itself is undertaken. Rather, the producers are "merely" subjugated to exchange, the market and the capitalist, and not to the production process itself. As a result, "society" remains distinct from the economy, the determinants of the former' structure and movement are not even tendentially reducible to those of the latter...

The production of capital in the transformation of money into money capital has its historical premises, first, in developments that reached back to the origins of feudalism in Europe, namely, the Saracen closure of the western European interior to the Mediterranean world of very late antiquity, the loss of Baltic trade to Francia, the subsequent collapse of commercial exchange, then the invasions of the western zone (England, Francia, the sub-Alpine plain, the region north of the Alps where several great rivers, e.g., the Rhine, rise), and the evolution of the autarkic estate shaped by and predicated on social relations of personal dependency; second, developments that occurred at the end of the feudal era proper, the transformations of labor services on the land into money rents, and the rise of towns in the interstices created by fragmentary political authority, but, unlike in Japan - the other instance of the original appearance of feudalism in world history,¹¹ towns of a peculiar sort unique to Mediterranean Europe, those

⁹MEGA II.4.1. *Ökonomische Manuskripte, 1863-1867*. Sechstes Kapitel* ("Formelle Subsumtion der Arbeit unter das Kapital"), 96-101.

¹⁰....das Exploitationsverhältnis von allen patriarchalischen und politischen oder auch religiösen Verquickungen *ausscheidet*. *Ibid* („Nachträgliches über die formelle Subsumtion der Arbeit unter das Kapital“), 98.

¹¹In Japan, the towns (and some of them were actually great cities),** that is the various layers of large stratified merchant class, were politically subordinate, and abjectly so, to the Shogun and the landed lords, the *daimyō*, for two reasons. First, economically

* „Resultate des unmittelbaren Produktionsprozesses.“

** Admittedly, at a later date (though it should be noted that Japanese feudal society, and beyond it the modern tributary formation which superseded it, did not exist in the same historical time as feudal epoch in northwestern Europe), by 1700 Japan may have been the most densely populated country in the world. Edo may have a population of a million, Kyoto and Osaka 400,000, making Edo the most populous city in the world and Kyoto and Osaka at least larger than either London or Paris, and caste towns with populations of 30,000 to 40,000 were not uncommon, some ranging up to 100,000. John Whitney Hall, *Japan: From Prehistory to Modern Times*. New York, 1971: 210.

established on the basis of municipal liberty entailing the rediscovery of Roman law and on this basis elaboration of a mercantile legal code whose fundamental element was a concept of absolute and unconditional property, a theoretical defense of private property (land, woolen manufactures, and merchant inventories) in production and distribution. The development (of capital as money capital) was at the same time the historical process in and through which *the social reality of Western Europe was fixed*, so that Western Europe became the primary zone and locus of the epochal development of the formal domination of capital over labor in production.

The monetarization of rents was the other side of the abandonment of estates, escape to towns and occasional expropriation of peasants, the recreation of a large stratum as labor with limited property (e.g., cow, plough) in the countryside (and the city where the peasant-become-apprentice now may have possessed tools but did not own his own shop), so that the laborer (the peasant family) was divorced from the soil he, she, it worked. Ownership of the land, no longer mere possession (*seisin*), and, in more than a few cases, instruments fell to the merchant as appropriator. Once he reunited the laborer with that land (say, leased to him for shares), though the forms, rhythms, tempos and instruments deployed in production remained unchanged and proceeded just as before, all the conditions for the establishment and development of the formal domination of capital over labor in production, and as an epoch in the history of capitalism, had come into being. The typical relations of social groups to one another in production, call it the class structure, then, consisted in the countryside in a small stratum of freehold peasants, the mass of peasants working the land under terms of a lease (in central Italy in particular, this took the form of sharecropping) with a thinner layer of landless laborers subordinate to them (perhaps for a wage, more likely for subsistence) especially during peak seasons (planting, harvesting). The landlord was not engaged in farmwork, in agricultural production. In the cities, we find a mass of artisans of various sizes who employed some apprentices, merchants who provided raw materials to these artisans (elsewhere as in Florence, primarily woolen cloth) and collected the finished product while paying contractually stipulated amounts in coin (debased silver, not gold); here in the artisan shops there were a couple or three categories of work that employed a layer of waged labor (paid contractually), at the highwater mark of Florentine merchant manufacture far larger than the artisanate as a whole, at other times probably not as large a stratum. A similar situation existed with the building and construction guilds. A mass of retail shopkeepers themselves small merchants were occupied, and provisioned the entire population, with services oriented toward immediate consumption (bakers, butchers, apparel merchants, etc.). Lording over these relations were a handful of truly great merchants who were also bankers, who within the towns-become-cities had warehousing facilities for the storage of raw materials and finished products and whose geographical reach, now as bankers, went beyond the city and region and was continental. These merchant-bankers unified the respective structures of countryside and city, for they were at the same time invested in rural holdings, and thus appeared among the largest of the landlords leasing farm lands. This was the basic situation with respect to formal domination at the height of its early epochal efflorescence...

With the demise of feudal social relations what was different now was threefold. First, the laborer confronted the master craftsman, capitalist farmer, landlord or merchant as a commodity owner, possessor of a capacity for labor, while the craftsman, capitalist farmer, landlord or merchant similarly confronted the laborer as commodity owner, possessor of instruments and medium of production. This was not and is not obvious, but objectively it was decisive, that is, it is a *purely economic* relation (between employer and laborer) that now structured the production processes as a whole: The labor process as a valorization process increasingly admitted of no other determinants whether religious, patriarchal or social, though, as we have seen in historical fact (and in this paramount respect, Marx's theorization did *not* adequately base itself on historical contents), a political determination, princely power, could and did enter into the relation, e.g., could and did transform it, redirect it, terminate it, could and did sever the labor process from the valorization process, the subsumption of the former by the latter, disrupting the movement of capital, *subsuming it and its circuits to the requirements of power...* The second difference was in the scale on which production operated, both as regard to the numbers of laborers engaged by a single employer and the quantity and massing of means of production necessary to sustain operations. In this respect, compare a lord that could dispose of the labor of five, ten even twenty peasants or, better yet, even a large craftsman's shop with one or two apprentices and three, maybe four or five journeymen, with the Florentine woolen merchant-manufacturer who put dozens of artisans to work in dyeing, dressing and finishing raw woolen imported from England. Third, merely tendential, and contradictorily (relative to the first point), but over historical time of increasing force and efficacy there was the subordination of the labor process to the valorization process, of the demand of the capitalist confronting laborers that

merchants were largely engaged in both food distribution and wholesaling and retailing goods (clothing, jewelry, furnishings) for the luxury consumption of the Shogunate courts and the great lords. (The cities, castle towns – a peculiarity of Japanese culture and history, mentioned in the note below, were the residents, run by, the aforementioned *daimyō*. The urban artisanate, a small stratum, too was politically subordinate (and the peasantry, by and away the largest class in Japanese society across its entire history prior to the first imperialist world war, was simply crushed, periodic revolts notwithstanding, under the burden of tribute and taxation, held down by the class of warriors, the *samurai*). Second, the class relations intertwined with and overlaying productive relations between subordinate (peasant, artisan, merchant) and dominant (shogun, great lords and *samurai*) strata were perhaps the most intensely hierarchical seen in any culture and society in world history.

only that labor time which is socially necessary be incorporated into the product, that every product only "represents," as it were, socially necessary labor time or as Marx parenthetically notes, /less than it.¹²

Comprehending the actual historical conditions within which the formal subsumption of labor under capital occurred¹³ has required that we reconstruct the formation of capital, meaning the movement of capital at its origins. Unlike the situation in Florence in the era of Communal decline and initial monarchical centralization, this examination has two premises. First, only that historical development which proceeds in a systematic way did, can and will give rise to capitalism as a totality of social relations determinant for all of society. The occasional and sporadic appearance of capital on the margin of social formations which as a whole exhibited limited or restricted market characteristics has not, cannot and will not. Second, at its outset it is necessary to consider only development which was "spontaneous." Capitalist development which has taken shape as the central moment of a statist-propelled conscious effort to "modernize" (e.g., Japan from 1868 forward) or as efforts by statist politicians of one society to compel the transformation of the basic productive relations of another society during or in the aftermath of a war (e.g., United States military occupation of and war with Vietnam, 1965-1972), already presupposes the entire historical movement sketched out above that created capitalism as contradictory, irreversibly established yet unstable, global system of social relations.

In the historical sense, its genesis occurred on the basis of towns wherein merchants of various sorts cohered into an identifiable social group and became the first social layer in history to exclusively pursue the accumulation of money wealth (not conquest or plunder, not honor or glory) for its own sake.¹⁴ We would note that, grounding this, the life activity of the bourgeoisie (as in counting its hoard) was already given over to a purely and simply quantitative understanding of man, society and the *cosmos*. Thus, we are required to, as we have, specify the historical, contingent conditions under which capitalism first emerged. This returns us to the "spontaneous" emergence of capital as it first occurred in era of feudal decadence (1050-1200) in the social formations of northwestern Europe, including its bastardized because centralized form in England...

We can now restate the characteristic features of formal domination of capital over labor in production... this is a development of capital in its transformation from money into money capital... as it has historically formed, rising from this history to its formal conditions and features.

First, a long historical development had transpired in agricultural work, labor of some degree of servility (never more than formally free), markets that went beyond immediate locales and money as a universal equivalent of exchange were all already constituted conditions; second, already noted, the separation of agricultural labor from its medium of production had developed, reunification of that labor with the soil now the property of another (a merchant who provisioned that labor and retained it, exercised ownership but not actual control) had been effected, some freeholds worked for familial self-sufficiency, and labor that was landless (but not entirely propertyless) worked for another and was remunerated in kind (and perhaps some wages ostensibly to satisfy socially reproductive requirements through market purchases); and, third, the labor process itself was in question: While formal domination is activity undertaken from outside the production process proper usually by this merchant; while he siphons off surpluses in exploiting labor and does so without either reorganizing those productive activities or generating new technical inputs to them; while the producers are "simply" subordinated to exchange, the market and the merchant, but not to the production process itself, the merchant mediated the relation of the social class atop the entire societal organization and structure, the prince, king, the individual tyrant, the "One," to production, a relation in which the demand for dynastic and territorial aggrandizement was objectified and materialized in weapons of war; in which new organizational forms of warfare developed; in which territorial states formed; in which continental markets emerged; in which the great merchant as banker accumulated vast amounts of money capital; in which this new societal "model," the subjective desire to accumulate (dynastic holdings, money wealth), took hold of a thin layer of lease holding peasant-farmers, which differentiated itself out from the rest (of the peasantry), forced the rest to give up its holdings and employed them as waged labor. The prevailing existing forms of productive activity, characteristically petty commodity production, did not remain "just as they were before"; instead, the social and material premises for the inauguration of capitalist production (capital as capital, real domination, production for production's sake, the self-valorization of value) were created...

¹² "...indem alles aufgeboten wird, damit das Produkt nur *gesellschaftlich notwendige* (oder rather noch weniger) *Arbeitszeit* darstellt..." (Emphases in original). Marx, *Ibid* („Nachträgliches über die formelle Subsumtion der Arbeit unter das Kapital"), 97.

¹³ Our *Genesis of Capital: Formal Subsumption and the Bourgeois Revolution*. St. Paul, Third Edition / Second Revision, 2019: Book II (*Lineaments of the Epoch of the Formal Domination of Capital over Labor at its Origin and the Formation of a Continental Economy Based on Textile Manufacture, circa 1050-1765*) is devoted to precisely this task.

¹⁴ In the actual course of history, the formation of towns and merchants in this sense was dialectically premise and presupposition of the appearance of money, coin, as a universal equivalent, thus, in part distinguishing development on the Italian Peninsula, and the entire Mediterranean, Baltic and western European world, from an otherwise formally similar development in Japan, where a general equivalent, rice as a circulating medium, emerged, but never a universal one, though, to be sure, (Chinese stamped) coins were in use in the northern port towns for purposes of Shogunate regulated trade with China. Toyoda Takeshi, *A History of Pre-Meiji Commerce in Japan*, Tokyo, 1969: 12.

Yet formal domination never achieved an autonomy as a logic of economic development, as does capital under conditions of real domination (rising from historical practice and defined in the same terms with the singular important transformation of the merchant into an industrialist, i.e., one who intervenes in and reorganizes production with the singular objective of increasing production, productivity or accumulating capital, a practice that became irreversible with the socially generalized, systematic inputs of science and technology into that production), and, it thus never set in motion an autonomous logic and movement that encompassed the whole of society, the industrialist and his organization, the state, included, immediately subordinating all to itself. This much said, the weight of formal domination in and on ordinary, or daily, life was enormous, or over historical time it grew increasingly so; for, it was only in the ingression of extraordinary events – most often war, but infrequent yet traumatic occurrences such as a plague outbreak – into that daily life that other determinants bore down on it with greater force.¹⁵ As the movement of capital deepened and the epoch unfolded, as wealth accumulated this movement slowly created in production a separate sphere of social life, and tended toward but never fully achieved autonomous development, a logic of such was never entirely constituted. Yet in the “space” created by this epoch, and from out of the classes who rose on its (formal domination’s) foundations, an intellectual layer would split off, a reflection would arise, a theorization would form... a mechanics, call it the modern science of nature... that would formulate and articulate the conditions in nature in which capitalist development uniquely was at home (*heimlich*), and this theorization would come to mediate through its systematic ingression into production, the freeing of wealth from its mediate subordinate to power, would set in motion the autonomization of capital.¹⁶

We would, however, be remiss if we did not also note that in the entire historical epoch in which capitalist activity initially developed, capitalist production (if ever, it is not permissible to go so far as to speak here of a “capitalist mode of production”) was of subsidiary significance for the entire social formation; at least at the outset (say 1190) down to roughly 1520, it constituted a subordinate productive form, a largely mercantile moment in a vast social formation consisting generally in various forms of landlordism through which diverse nobilities and aristocracies, the social basis of a much latter reconstitution of principalities through formation of territorial kingdoms in western Europe, extracted surpluses from various formally free and unfree peasants...

Summarily, we offer a typology of those “phases” of its historical development, an inner history if you will from the standpoint of formal domination in production:

Long-distance trade, the Champagne Fairs and centrality of textile (woolens) production and its dispersed sites of manufacture - a first “phase” or initial development of the early continental economy, 1190-1250;

a second “phase”: Nascent princely mediation of merchant hegemony over the growing continental economy, communal struggle against dynastic politics and the papacy, merchant banking and bills of exchange driving qualitative expansion (textiles and grain) of the continental economy, 1250-1290;

the highwater mark of early economic expansion: A qualitatively expanded continental (textile) economy on the back of republican communal ascendancy (culmination of second “phase”), 1291-1338;

contraction and depression in the era of the Black Death (third “phase”), I; cumulative damage of warfare, plague and demographic collapse and its consequences: Population contraction, depressed trade and transformation of production and reorientation toward luxury markets, 1339-1377;

contraction and depression in the era of the Black Death (third “phase”), II: Cumulative damage of warfare, plague and demographic collapse and its consequences; consolidation of the regimes of the early merchant bourgeoisie and centralized monarchies over the corpses of suppressed popular uprisings, 1378-1391;

population and economic stabilization at lower levels of exchange: A new (fourth) “phase” of the continental economy in the era of increasing territorial growth of centralizing dynastic monarchies, shift of center of textile production from the Italian Peninsula toward northwest Europe, 1392-1491;¹⁷

¹⁵If we reflect on the *actually historical becoming* of feudalism at its origins, we are compelled to draw a contrast between two originating forms as they appeared in western Europe and Japan, permitting us through this contrast to suggest the schematic historical account of formal domination presented here.

¹⁶See *The Critique of Science*, Interlude, “Real Domination and the Autonomization of Capital.”

¹⁷It was at this moment, fully realized by 1490, that these developments all came together to launch, thus signify, a new qualitatively more developed penetration of formal capitalist social relations based simultaneously on technical innovations and the incorporation of numerous small towns and large villages that grew along these new trade routes. Capital’s *formal domination* had *neither been politically stabilized...* such would be the objective, historical function of the bourgeois revolution which still lay in the future... *nor had it become irreversible; but it had become more entrenched and more resilient to the political mediation (dynastic ambition and conquest) that had so often nearly ruined it in the past* and which had prevented it from achieved autonomous economic development.

Antwerp as the hub of capital's formal domination achieves epochal maturity: The penultimate "phase(s)" of the formal domination of capital over labor in production in the epochal sense, 1492-1672 (1687),¹⁸ this the first "phase, 1492-1590;

Amsterdam as the hub of the formal domination of capital over labor becomes epochally ascendant in vastly expanded production and commerce: The capitalist economy in the penultimate "phase(s)" of the formal domination of capital over labor in production in the epochal sense, 1492-1672 (1687), this the second "phase," 1590-1672 (1687);

objective historical outcome of the Three Dutch Revolts, 1569-1589, together with the Eighty Years War, 1569-1649, and the triumph of the Puritan bourgeoisie over Stuart kingship, 1642-1649: The bourgeois revolution secures political stabilization of the formal domination of capital over labor in production;

the epochal closure of the formal domination of capital over labor in production: The final, mature "phase" of formal domination with advance (London) and decline (Amsterdam) in the locus of production and its shifting center, as the immediate antecedent to the rise of modern manufacturing, industrial capitalists and a factory proletariat in England, 1688-1765, transpires.

Real Domination at its Origins as an Epoch in the History of Capitalism

Real domination in production develops within ascendant formal domination as an epoch in the history of capitalism, and once it appears is an increasingly significant, yet "adjunct" form of capitalist domination down to 1914, i.e., to the onset of the first imperialist world war...

*Where the producer... whether in agriculture or in urban crafts, according to Marx it makes no difference... himself assumes the role and function of capitalist... hiring [exploiting] labor and robbing his former compatriots, workmates, fellow laborers, similarly situated producers, of their independence as producers, reducing them to proletarians in the fullest sense, i.e., introducing changes into the work processes by way of their reorganization, new inputs or both... the really revolutionary way to capitalist development on its own basis opens up...*¹⁹

Under propitious market conditions, particularly increased demand, the capitalist employs more workers. The growth of demand also leads to enlargement of the scale of production. At a certain point, a point different for each industry and at least initially in the historical sense for each capitalist, this increase in the volume of capital employed commits the capitalist (who had previously merely supplied means and materials of production to "his" laborers) to directly taking control of the process of production itself. This commitment transforms him from a merchant into an industrialist, a capitalist who actually intervenes in and organizes the forms labor takes in the workplace, and who transforms the means of production by bringing to bear on them new technological inputs (machinery). The capitalist now preferentially extracts surplus-value relatively by means of increases in labor's productivity. He loses his individual character, i.e., he increasingly behaves as a personification of capital (he has assimilated and internalized the logic of accumulation, see below), while capital itself assumes direct social proportions. Production itself calls forth a growth in population, new branches of industry multiply and diversify their subspheres, a greater productivity of labor and cooperation of labor on a massive scale and an increasing mass of existing and novel commodities now all appear. Each of these features in turn calls forth the others.

In this specific respect, the advent of the railroads was the decisive event in the development of real domination in production. It brought into being the largest permanent workforces to date in the history of capitalism, it required a qualitative increase in the division of labor within the enterprise, pushing beyond national boundaries from the get-go its scale was continent in scope, it required funding on a scale never previously encountered and with novel means of financing, and it created a new form of capitalist organization of the firm...²⁰

This whole movement, in the strict sense, inaugurates the capitalist production proper or, the real subsumption of labor under capital, call it *real domination*.

¹⁸The "ultimate 'phase,'" though not the final, of the epoch of the formal domination of capital over labor in production was that which immediately preceded both chronologically and materially the first appearance of real domination, i.e., that "phase" in which the productive, social and cognitive premises of the initial appearance of real domination were fully worked out. Date it from 1672, from the Dutch "disaster year" marking that moment in which the slow loss of Dutch hegemony began, or from 1687, from the date of the publication of Newton's *Principles*, the moment from which the modern science of nature began to exercise cultural hegemony over English practical thought, *the ambiguity is fundamental*, to 1765, that moment at which the movement of capital first established the system of social relations we call capitalism on its own foundations, the oft-acknowledged starting point of the Industrial Revolution so-called.

¹⁹In point of fact, historically it has made a huge difference whether the producer was a capitalist farmer or a master craftsman: In England, the more than century long (circa 1450-1600) differentiation of a class of capitalist farmers out of a peasant mass historically demonstrated an autonomous agricultural transformation its priority over the urban transformation, and is accordingly the really revolutionary road (i.e., it has produced specifically capitalist social relations in their most unadulterated form), in the development at the origins of capitalism.

For Marx, *MEGA II/15 Das Kapital. Kritik der politischen Ökonomie. Dritter Band: Der Gesamtprozess der kapitalistischen Produktion* [hereafter *Das Kapital*], 327, where he states, „Dies ist der wirklich revolutionierende Weg."

²⁰Alfred Chandler, *The Visible Hand: The Managerial Revolution in American Business*. Cambridge (MA), 1977: 81-144.

*The central feature of this development, which secures capitalism as a system of social relations and makes its progress irreversible, is the systematic and sustained, direct application of science and technology to the production process. By the middle of the chronological nineteenth century, the magnitude of strictly capitalist operations was large enough to call forth this development (which at any rate is given with the very character of science itself), for in this subjection of production wholly to scientific determination capitalism established itself on its own foundations...*²¹

In this respect, we might ask if the worlds of ancient and modern tributary formations knew iron, copper, lead, silver and gold, how, apart from the scientific exploitation of mineral resources, might have manganese, nickel, cobalt and aluminum been discovered, utilized, and then become incorporated into specific, industrial processes early in the epoch of the real domination of labor under capital?

Recognizing that at its origins this ingression of science into production was (and is always) carried out by human beings as bearers of scientific theories, concepts and practices engaged in productive activities, science entered production in one of two ways.

First, the relation was irregular as in the case of Josiah Wedgwood the china manufacturer and Joseph Priestley scientist and chemist, the latter who as a scientist consciously, deliberately and with a view to utilitarian outcomes pursued science largely as experimentation (in the fully modern, not Galileo's, sense). In this manner, a number of important innovations and inventions resting on scientific knowledge and understanding were embodied in devices, processes and procedures between, say, 1760 and 1825. For example, Claude Berthollet created chlorine bleach, which, as Rondo Cameron indicates,²² formed the foundations for heavy chemical industry throughout the early epoch of real domination; and, even if James Watt was not especially scientifically adept, work with his steam engine and its developments formed the basis for elaboration of the laws of thermodynamics, particularly the second proposed by Rudolf Clausius in 1850.

Second, the relation was systematized *by the state* through the establishment and funding of higher educative and technical schools. These schools employed renowned scientists as faculty. To students, faculty imparted the methods of measurement (e.g., the metric system), calculation and classification originally developed in the sciences of nature and mathematics. Students were methodically trained in various fields of constructive human endeavor. These included, most importantly, mineral extraction (mining); surveying, road and bridge and rail, canal and port, civil and naval architectural and fortifications construction; etc., with the same aims, now institutionally incarnated, of advancing scientific knowledge for the purposes of exploiting the Earth, understanding, harnessing and even creating (new) material processes in nature. Obviously, the civil engineer occupied pride of place in all these developments, and the French... starting from the Convention of '92-'93 and from Napoleonic decree... were the first to establish a whole series of schools, institutes and facilities which embodied these aims,²³ which trained military and civilians engineers, technicians and scientists engaged by private firms, all of whom in turn brought scientific concepts, methods and rationality directly to bear on production. Abroad, not just within the territorial confines of France, the various courts and regimes of Europe and further afield employed French engineers and scientists for some of the most important productive developments from 1825 down to the advent of imperialism in the arena of the world (1870): French engineers developed the coal and steel industries of Russia (including today's Polish Silesia); introduced the Bessemer converter and an internationally competitive locomotive factory in Austria; were responsible for the advance of iron manufacture (introduction of the rolling mill, improvements in puddling process) and a good deal of the industrial infrastructure of central Italy; developed safety and technical mining procedures in Westphalia; undertook and were in charge of infrastructural development in northern Egypt (irrigation, embankment and damming in the lower Nile, and road, canal and port construction in Alexandria); and similar infrastructure (roads, bridges, ports, public buildings and sanitation systems, and railways) in Wallachia (Romania); and built, having designed, bridges spanning most of Europe's great rivers as well as harbor and dock works for half

²¹Marx clearly saw this. He states, "...die Produktivkräfte direkt geschäftlicher, vergesellschafteter (gemeinsamer) Arbeit, durch die Kooperation, die Teilung der Arbeit innerhalb des Ateliers, die Anwendung der Machine, und überhaupt die Verwindung des Produktionsprozesses in bewusste Anwendung der *Naturwissenschaft, Mechanik, Chemie* etc...." ("...the productive powers of directly, social, socialized (common) labor, are developed through cooperation, through the division of labor within the workshop, the employment of machinery, and in general through the transformation of the production process in conscious application of the *natural sciences, mechanics, chemistry*, etc." (MEGA II/4.1. *Ökonomische Manuskripte, 1863-1867. Resultate*, "Reelle Subsumtion der Arbeit unter das Kapital oder die spezifisch kapitalistische Produktionsweise," 95). Our translation. Emphases added, those of Marx deleted); and again, a little later, "Bei der realen Subsumtion der Arbeit unter das Kapital... dies sozialen Produktivkräfte der Arbeit entwickelt und... mit der Arbeit auf grosser Stufenleiter die *Anwendung von Wissenschaft und Maschinerie auf die unmittelbare Produktion*" ("In the case of the real subsumption of labor under capital... labor's social powers of production are developed, and with labor on a large scale the *application of science and machinery to direct production* takes place." *Ibid*, Our translation. Emphases added, Marx's emphasis deleted). Just as clearly, however, he did not and could not critically understand its significance, the class character of modern science, the centrality of science to nature domination and, accordingly, its vast acceleration of capital's assault the biosphere. See *Capitalism and the Domination of Nature*, "Capitalist Criminality."

²²France and the Economic Development of Europe, 1800-1914. Princeton (NJ), 1961: 44. Similarly, Eric Hobsbawm (*The Age of Capital, 1848-1870*. London, 1975: 42) remarks, "the artificial dye-stuffs industry... came from the laboratory to the factory."

²³Cameron, *Ibid*, 43, 45-54.

Europe's seaports.²⁴ Students from all over Europe studied in French schools, and in this way bourgeois notions of order, efficiency and rationality, and material progress, were diffused through the traditional intelligentsias, merchants and retailers, fledgling industrialists, the business classes generally, on the continent and in areas of colonial penetration.

This was (and is) the movement from science to capital (generating it in its fixed form) at its origins. But the movement was (and is) reciprocal: Once scientific procedures organized work processes, and once machines constructed on the basis of scientific principles were deployed in production, the mastery of work, production and machinery required and demanded the assimilation of the common understanding of science of the day (at whatever level this understanding existed), and, as in the case of the steam engine alluded to above, even occasionally was the point of departure for novel scientific theorizations. In the same manner, capital investment where there had been none or little before constituted as such a diffusion of science and modern technology. (And, similarly, where work, production and machinery have already been fully placed on scientific foundations, capital investment that incarnates advanced or even novel scientific principles raises the level of that common understanding, infusing social awareness with a physicalist vision of reality,²⁵ or there is no mastery of production and work) ... *It was at this precise moment, that at which inputs to (machinery in) production require scientific understanding and awareness to minimally operate and maintain them, that real domination in production, the development of capitalism, capital as capital, became irreversible...* There is here a movement from capital back to science, which completes an incessantly growing and developing circle that is necessary for and essential to the expanded reproduction of capital. This is the service science renders capital, demonstrating their internal affinity and inseparably, which becomes ever tighter the more real domination develops as an epoch in the history of capitalism...

With the systematic ingression of science into production, the familiar face of capitalism now appears or, stated differently, what now appears is the subjugation of the work processes themselves to capitalist rationality. This subjugation is achieved through scientization of work rhythms and tempos. It has as its consequences the constant revolutionizing of production itself, and the loss of actual worker control over and understanding of both instruments of production and that process as a whole. Tendentially, producers begin to appear as a "collective worker" (*Gesamtarbeiter*), increasingly appendages to the production process as a whole, no longer "merely" subjugated to exchange, the market and the capitalist; communities undergoing societal amalgamation tendentially lose their compactness and distinctness in relation to the "economy," the determinants of the structure and movement of the latter increasingly and directly shape the former, the categories of the critique of political economy are first reflectively grasped and explicated (as in Marx) on this very basis as science passes into and reshapes production.

At the same time, this ingression has the further consequence of rationalizing activities within society (in order to achieve penetration of the value form, to commoditize and market aspects or objects connected with those activities and the activities themselves, to produce them according to a capitalist logic, i.e., in accordance with the waged relation and minimal socially necessary labor time in order to generate surplus-value): Rationalization recreates social activities as distinctive institutional spheres within society mediately subordinated to the logic of capitalist development, to accumulation, distinctive because in their very rationalization they develop their own norms and rules which govern human behavior within these newly forming institutions. This movement (rationalization) that creates this development creates society, i.e., dissolves distinct communities into a system of social relations which harden and congeal, and which, in hardening form a network of seemingly separate institutions that are connected through exchange by their mediate subjugation to the logic of accumulation. Society, whose formation is a simultaneously generated product of the same movement of capital that creates an economy (i.e., the thingly, objectively institutional

²⁴ *Ibid*, 57, 58, 55, 59, 93, 95, 96, 101.

Those seaports included Antwerp and Zeebrugge (Belgium), Lisbon and Oporto (Portugal), Cádiz (Spain), Leghorn (Livorno) and Genoa and Trieste (Italy), Fiume (Rejeka, Croatia), Salonica (Greece), and Constantinople (Istanbul, Turkey) among others. *Ibid*, 101, n. 54.

²⁵ Constituted in and through the theorization of the modern science of nature (in particular, the new physics), the "axiomatic systematization" and those fundamental concepts ("matter," "energy," "subatomic particles," "light," etc.) which form its core (are its foundation and mainstay) are reductionist assumptions, atomistic postulates of a theoretical analysis projected as real, as underlying realities. This is physicalism. (*The Critique of Science*, Third Study, Part III, "The Materialist Dialectic.") For instance, take the case of a beautiful song bird, the indigo bunting. Any typical birding description of it will read much like the following: With their wondrous deep blue plumage, the male is "actually a black bird, as it doesn't have any blue pigment in its feathers. As with the Blue Jay, sunlight is refracted within the structure of the bunting's feather, making them *appear* blue"; but as we all *really* know, they are black. Cited from Stan Tekiela, *Birds of Minnesota. Field Guide*. Cambridge (MN), 2004: 56 (emphasis added). No, Stan, if *all* birds are black in the night, then in the bright light of day bunting's coloration is just as it is perceptually given, the blue is *real*. The assertion of black coloration resorts to an explanation based on a spectral light analysis, itself a product of a theory of light as electromagnetic magnetism, a theory-become-common sense, but a theoretical construct nonetheless, one formulated on reductionist assumption as an aspect of the totalizing project of nature domination otherwise known as the modern science of nature. Absent a world remade in its entirety by capitalist production, thus without the cultural hegemony of that science, the assumption would not make any sense, and the assertion an indigo bunting is black would be considered the speech of someone who doesn't see well, or is perhaps a little crazed.

connective thread), now necessarily appears as a system into which individuals as abstract units are inserted, and which can be scientifically analyzed and mathematically described on the model of the modern science of nature,²⁶ creating objectivistic psychologies (such as behaviorism), "economics" that explains social development in terms of "consumer choice," etc., whose "information," "data" and "facts," in turn, are utilized in producing technologies of social control (e.g., the instruments, weapons, procedures and techniques employed by the state's armed force, cops, gendarmes and soldiers, in dealing with large groups of people in the presence of politically important personages, during spectacular events, in "riots," and in other forms of resistance and upheaval)...

In the whole course of history with exception of those communities that are implicated in the immediate run up to capitalism, a massive, reified institution, congealed social relations formed in and through productive activity, *an "economy," has not separated itself out from the community, has not formed an institutionally distinct sphere.*²⁷ For these communities, productive life simply does not possess the autonomy and immanence, and has not the socially determinate weight, that it does for capitalist societies established on the basis of real domination in production; for them, the economy has not only become differentiated out from the activities of daily life that constitute the community, it is not institutionally separate, it does not tendentially form an autonomous regulator of social life in its entirety. This is crucial:

In emerging and expanding capital creates itself as a movement that appears without agency, or as self-agency without foundation. This movement rests on the abstraction of labor in production: Beginning from concrete, purposive labor, but as the capacity for labor employed and deployed in production, labor is rendered abstract, i.e., generalized (unspecific), temporally quantified, materialized and objectified as "value," as the substance of products produced for exchange, as commodities, a surplus of which is realized as such only in its phenomenal form as profit that in turn can be reinvested by purchasing capacity for labor, means of production, raw materials, which in this sense means that "value" is capital. This process (valorization) generates the actual, effective shift in societal practice from concrete human beings as workers to *capital*. Capital is the real subject of society under capitalist production.²⁸...This movement and its moments (commodities, price, profit, as well as the higher order abstractions, stocks, bonds, their markets, etc., mere abstract moments of a social relation appearing as things, yet historically constituted real abstractions) form the foundations for the collectively constituted institutional abstractions (such as workplaces embodying productive materials, instruments and machinery (i.e., plant and equipment), business firms, industries, regulatory agencies, etc.), that, taken together, with this movement and its moments, constitute this "economy": The economy is the objective institutional context in which capital's personifications, capitalists, function and operate... In reshaping social life in its own image, capital literally creates the "economy." The "economy" does not immediately appear as the practice of social groups and the social relations that arise on those practices and thereby form it: The "economy" is reified, appears thingly, a real movement that shapes what it seemingly encompasses. It is autonomous and self-regulating because it is in an immediate, practical sense a mystified and objectivistically understood sphere of society.

In its relentless drive to create surplus-value, capital's movement tendentially reduces all social relations to productive relations, to those of the "economy." (That is to say, social relations, such as between parent and child, student and teacher, etc., tend to not only find their model in the relation between wage earner and capitalist but become mediately subordinate to the logic of accumulation.) To the extent productive relations have come to dominate social relations, to that extent capital accumulation (valorization) is the internal, hidden yet objective logic organizing society as a whole: Under conditions of real domination in capitalist production, capital is the subject of society. This seemingly autonomous movement aimed at extraction of surplus-value constitutes the meaning and significance of speaking of capital as capital, as self-valorizing value...

Here too we can find a typology of "phases" of the epoch (still ongoing) of capital's real domination:

The factory, bringing masses of people together under one roof, first appeared circa 1760 in England. Other countries followed. Its development, its creation as the nodal point of the system of capitalist social relations, was inseparably bound up with the production of mechanical power from steam. It marks the first systematic insinuation of genuinely

²⁶Kosik, *Dialektik des Konkreten: Eine Studie zur Problematik des Menschen und der Welt*. Frankfurt am Main, 1971 (1963): 84. This analysis is the basis for understanding the development of sociology as a science in the empirical sense. See *The Critique of Science*, Third Study, Part IV, "The Critique of Historicism."

²⁷Under capitalism, institutional differentiation is, as already suggested, not restricted to the economy: In the practice of daily life, separate activity contexts beginning with work take on a life of their own, each with distinctive norms governing behavior and expectations. In this sense, we speak of the institutionally separate spheres of the family, education, etc., and most importantly the state.

²⁸This, as we shall see, is capitalism in its intelligibility. Without *conscious intervention* in capitalist dynamics, functioning autonomously and autonomically the system reproduce itself (at ever degrading levels) endlessly.

In the end, this is the only point worth making:

Without conscious intervention by an agent capable of reorganizing society as a whole, the whole system will automatically reproduce itself, thus run up against all its internal contradictions, and push its toward crisis, massive devalorization, and whatever the toll (in objective substance, human misery, human life, and as with each passing day we learn, in damage and destruction visited on earthly nature itself), renewal.

capitalist methods into production. Characterized by the massive presence of women and children, exceeding long hours, pervasively dangerous work, low wages and frequent visible deformation and short lives of workers. Within the overall ascendancy of formal domination as an epoch in a history of capitalism, date it, 1765-1830;

A second form, a development of real domination in production... and this was not restricted to England, but was "universal" as every country, state or region that came to capitalism after 1830 and before the first imperialist world war experienced it... was centered on a singular complex of technological inputs that revolutionized production. We refer to the advent of universal machinery, presupposing and recreating a bifurcated proletariat, a small layer of highly skilled operating these machines (lathe, capstan, turret), and a massive layer of unskilled during the nasty, difficult and dangerous work. Within the overall primacy of formal domination, date it, 1830-1914;

a third form of real domination, itself like the others an outcome of victory of first the bourgeoisie, then capital, over workers in fierce class struggle, was serialized, continuous flow machinery (often referred to as assembly line production). Known as Fordism, characterized by vast work sites, huge capital investments in plant and equipment, stable work, high wages and benefits in the metropolitan centers of capitalism, it was form of productive organization and the era it created which *illusorily* provides the mass spectacle image of capitalism.²⁹ Date it, 1915-1990;

a more or less novel form of real domination is to be found in digital (computerized) and automated organization of production expressed in universal casualization and precarious conditions of work (unbenefited, low waged, often part-time work). This is the historical present. It is during this era that we no longer characterize capital's hegemony simply in terms of production; rather we speak of capital's real domination *over society*, or, alternately, as the moment forward from which the various institutions of society have lost their relative autonomy vis-a-vis the "law" of value, and

²⁹Absolutely crucial to comprehending the *disappearance* of the proletariat as a historical class is the transitional era, its foundations in class struggle at the point of production, between formal and real domination, the transition itself characterized by the shift from universal machinery to continuous flow production as the material basis of industrial production.

Inter-imperialist rivalries which rapidly developed at the end of the long 19th century and which meant growing competition for markets, as well as the capitalist effort to assert control over a production process which skilled workers actually controlled, increased the pace of technical innovations in production. It was in this context that Fredrick Taylor developed his theory of scientific management, capital's science of production. The principles of scientific management are centered on formal rule-based rationalization of the work processes, the separation of work from worker skills and the assumption of knowledge of production by managers. These principles were *materially incorporated*, outcome of capitalist victory in vicious class struggle at the point of production (a struggle exemplified in one manner among others, by Fredrick Taylor's ongoing conflicts with skilled workers at Bethlehem Steel), into and animated the very sensuous construction and organization of the newly introduced, mass production machine technology, which, dialectically, in turn made this theorization the expression of a perverse (i.e., inverted) "real movement" of capital. Now "universal" machines (especially lathes, turrets and capstans) were the material premise of skilled worker, or craft, mobility and knowledge. These machines were not fitted to any specific production schema. But their replacement by "specialized" machinery such as Henry Ford's assembly lines required a complete reordering of production, since specialized machinery is necessarily sequentially arranged, connecting all the elements of production in their sensuous aspect one to another in order to form a chain in which products produced move through the process without interruption, hence, the alternate designation "continuous flow." This was a rationalization of production... each specialized machine in sequence performs a single operation on a single aspect of a product.... at once designed not just to deskill and dumb down workers, but to generate enlarged productivity. These machines require a specialized operator performing an extraordinarily simplified, repetitive, single task the motion of which is prescribed by the machine. The new worker employed in continuous flow production hardly required a lengthy apprenticeship, since he could be trained in a matter of weeks; he is deprived of the development of an organic relation to the machines; and knowledge of the labor processes, in effect embodied in the system of machine organization, is... at least ostensibly... removed from him to another newly created (managerial) stratum of the production process. With the advent of continuous flow production, the divorce of worker from means of production, no longer merely formal, was completed and materialized; conception and execution were entirely severed; skill was degraded, lost and reduced to a non-descriptive occupational category.*

Class consciousness, as it was classically theorized (Marx, Lukacs), congeals and is relative to a historically specific and transitory configuration of productive organization, one that properly belonged to the *closing era of the epoch of formal domination*: If productive relations tend to engulf society in its entirety, then an understanding of work and production would at the same time tend to be an understanding of the organization of society as a whole. Now the development of this insight, effectively consciousness of class, is the basic condition on which the challenge to capital has historically rested. The possibilities for consciousness rested on one historical specific form of the configuration of work, one based on the deployment of universal machines and one which disappeared with real domination as it was transformed and arose from continuous flow production. It was this configuration of work and production that has made consciousness of class as it has been understood in the past possible.

Scientizing (Taylorizing) these processes guaranteed that, *from inside production, workers cannot raise themselves to comprehension of society as a whole*. Call it capital's technical revolution: This "real movement" of capital undercut the entire classical theorization of consciousness of class.

* By "diluting" or social recomposing the working class, the scientific reorganization of the work processes destroyed worker vanguards everywhere. These politically conscious vanguards had been formed and formed themselves out of *a historically specific life-practice, one which was in turn inextricably bound up with a historically specific form of capitalist technology*... The type of worker dialectically formed out of this life-practice was doomed to extinction with the 'technical' revolution of capital that employers achieved in their offensive following the first imperialist world war against workers everywhere. *The objective possibilities for class consciousness as understood and apprehended in the classical formulation disappeared as the historically specific structure of the process of production, and the oppositional culture of daily on which these possibilities were grounded, was destroyed.*

are increasingly, directly and immediately subject to determination and discipline by the logic of capital. Date it, from 1991.

As forms of production organization linked to eras in the history of capital's real domination, the relation of formal to real domination in production or as epochs in the history of capitalism is not entirely straightforward, or linear: First, formal and real forms of domination in production (as forms of exploitation and surplus extraction) can and do co-exist, antediluvian forms of precapitalist domination can reappear. Second, we can nonetheless fix a date, about 1950, as that moment at which real subsumption of labor under capital became effectively actual in large parts of the world to underline to exercise hegemony (fully superceding formal domination) over the entire global system of social relations.

The Logic and Movement of Capital

Commodities and Value
Summary Analysis
(Volume 1, Chapter 1.1-2)

"In all science, beginnings are difficult."³⁰

And not simply for the reason Marx offers (the difficulty of the material). Theoretically, there is a problem with just where one begins an account of the whole or totality (of society):

First, the point of departure in the presentation of a "system" (i.e., analysis of the whole) cannot be arbitrary but must be *necessary*.

Second, it makes a difference... it is a question of coherency... where we begin. The difference is this: Without a proper point of departure (and one of arrival), we shall not generate an intelligible account. There is here, then, an element of methodological determinism, so that for any account to be validated, it must *receive its justification in the very course of that account*. Its, the account's, efficacy rests on its coherency together with the extent to which it is compelling.

In the bourgeois era strictly speaking, various philosophers have offered different answers to this problematic. At the outset of the era, Descartes, like Husserl at its formal end, began with systematic doubt. In the short twentieth century in the Anglo-American world, philosophical heirs (e.g., Wittgenstein) of the same bourgeois theorists began with the analysis of ordinary language.

Among philosophers, only Hegel fully understood the problem; he began (in the *Phenomenology*) with the *immediacy* of perceptual experience (which he called "sense certainty"), in other words, with what is simply given.

Now, this is the proper philosophical beginning and not just proper to philosophy but *any* cognitive endeavor that seeks to offer direction to human activity by illuminating this or that aspect, or the whole, of *reality*. *That point of departure is simply what is present, pervasive, and unavoidably there. To begin from what is given, even if later in the account it is appropriate to examine the genesis and formation of this givenness (actually this is de rigueur), needs no preliminary justification.*

And Marx? "The wealth of societies in which the capitalist mode of production prevails appears as an 'immense collection of commodities.'"³¹ Marx begins with what is immediately to hand, ubiquitously present, the commodity.

In the form of society under consideration in which social wealth appears as an enormous array of commodities, in capitalism, Marx notes the commodity has a dual, contradictory character. It is useful, produced to satisfy some human need; at the same time, contradictorily, it has an exchange-value, exchangeable in some proportion for other usable objects.³² Instantiating, he relates a quarter of wheat can be exchanged for *x* boot polish, *y* silk or *z* gold. Patently, the exchange-values of the various useful objects, use-values, must be "mutually replaceable or of identical magnitude." The exchange-value of any given commodity, here a quarter of wheat, then, expresses something equal. Meaning that exchange-value is a form of expression, in Hegelian terms (which Marx deploys), the form of appearance (*Erscheinungsform*) of a content that can be distinguished from it, something to which the various differing exchange-values (of boot polish, silk and gold) can be reduced.³³ That which is in common, to which these various exchange-values can be reduced, is this: They are a product of labor, but not just any kind of labor.

Consider the issue qualitatively.

That which makes a commodity a commodity... that which permits us to exchange a quarter of wheat for *x* boot polish, *y* silk or *z* gold... generally speaking commodity A for commodity B... in some ratio that renders them equivalent is the labor that is embodied in it. After all, it cannot be those characteristics that pertain to its use: It cannot, in other words, be a commodity, any commodity's, obvious sensuous features such as color or shape, other qualitative features such as density, its quantitative features such as weight or its functional features that indicate its

³⁰ "Aller Anfang ist schwer, gilt in jeder Wissenschaft." *MEGA II/10. Das Kapital. Kritik der Politischen Ökonomie. Erster Band: Der Produktionsprozeß des Kapitals*: Vorwort zur ersten Auflage, 7.

³¹ "Der Reichtum der Gesellschaften, in welchen kapitalistische Produktionsweise herrscht, erscheint als eine 'ungeheure Warensammlung.'" *Ibid.*, I, Kapitel 1.1: 37.

Hereafter we shall follow this format, *Das Kapital*, volume, chapter (and section) numbers followed by the page number(s).

³² The contradiction is between the necessary relation of use to the commodity and the accidental and changing relations of exchange; between the specificity of use and abstractness of exchange, and, we shall come to see, between production to satisfy human need and production for production's sake:

„Der Tauschwert erscheint zunächst als das *quantitative Verhältnis*, die Proportion, worin sich Gebrauchswerte einer Art gegen Gebrauchswerte anderer Art austauschen, ein *Verhältnis*, das beständig mit Zeit und Ort wechselt. Der Tauschwert scheint daher etwas Zufälliges und rein Relatives, ein der Ware innerlicher, immanenter Tauschwert (valeur intrinsèque) also eine *contradictio in adjecto*. ("Exchange-value appears first of all as the *quantitative relation*, the proportion, in which use-values of one kind exchange for use-values of another kind. This *relation* changes constantly with time and place. Hence exchange-value appears to be something accidental and purely relative, and consequently an intrinsic value, i.e., an exchange-value that is inseparably connected with the commodity, inhering in it (valeur intrinsèque), thus seems a contradiction in terms." *Ibid.*, I, 1.1: 38-39. Emphases in original. Footnotes deleted).

³³ *Ibid.*, I, 1.1: 40.

purpose and use. These instead, taken together, all serve to distinguish one commodity from another. (Even two otherwise identical commodities, say objects that are precision machined, are numerically distinct.) It is not, then, the specific labor, whether that of a carpenter, plumber or computer programmer, or the specific labor of any other productive worker; in other words, it cannot be any of countless sensuous and specific forms of labor, call them concrete labor. Or, again yet differently: It is not labor that is characteristically my labor, concrete labor... my forethought, my manual skill, dexterity and ingenuity, and my effort and exertion as it goes into making an object... that renders one commodity equivalent to another.

We are left with labor of homogeneous character, human labor in the abstract completely indifferent to whether, as Marx says, it is seamstress or tailor (or welder or baker) with whom the exertion and expenditure of labor originates. Objectified and materialized in a sheet, trousers, a building girder, in loaves of bread, these useful articles have value only to extent they are produced and sold as commodities, only because abstract labor is embodied in them.

As human labor expended, call it labor-power, without respect to either the form (activity) of that expenditure or the useful character of the commodities in which it has been materialized, value, qualitatively indistinct, is merely congealed quantities of homogeneous human labor. Not subject to qualitative determination, it can only be measured quantitatively. How is this magnitude to be measured? By its duration, as labor-time consumed in its expenditure, in a society and culture which has already long rendered time quantitative, by the scale of hours, days, weeks and so on. But, in the same way, the value of a commodity is not measured by the time any given individual takes to produce it, for example possessed of more value as, say, a less accomplished worker at a loom, or spot welding on pieces of steel that flow by on a line, takes longer to produce it. Instead, manifested in the world of commodities, as homogeneous that labor-power is a socially average portion of the mass of human labor-power of society (albeit composed of countless individual units of that labor-power) which merely requires the labor time necessary on average to produce a commodity. (In the case of an inefficient welder, she'll miss a spot and the pieces of steel, forming only a component of a commodity, will render it, the commodity, defective. In the end, it will reduce the profitability of the capitalist in question, but that takes us way beyond our account.) This *socially necessary labor-time* "is the labor-time required to produce any use-value under the conditions of production normal for a given society and with the average degree of skill and intensity of labor prevailing at that time,"³⁴ even if society has become global (which it has), and even if under the hegemony of large international capitals commodities are produced at various sites across the planet and circulate worldwide.

Socially necessary labor-time is a central concept: it is, for example, the core of the "law" of value so-called; in deciding the significance of technical innovation in production; and in effectively disciplining capitalists in their competitive struggle.

But, for now, we'll simply gather together what we have recounted:

Among other things, the Prologue established is that a condition of capital as capital (self-valorizing value), is the peasants' loss of proprietorship in production. It is only propertyless, waged labor as it is subject to capitalist exploitation... this is abstraction as a "real material process," it occurs in production... only labor that is homogenized, quantified, objectified and materialized as emptied temporality (as socially necessary labor measured in units of objective time or, if you prefer, clock time)... what we call abstract labor... that permits us to equate one commodity with another in some ratio (1:1, 2:1, 4:1, 10:1, etc.). Of course, in a fully developed capitalist economy - and we shall come to this shortly - this exchange is carried out on the basis of money, which is a universal equivalent (a store of value). It is abstract labor which is embodied in commodities, and which is the "substance" of value.

Before proceeding, let's pause and reflect on the foregoing.

There are three features our attention is drawn to:

First, concrete labor is itself an abstraction. Steeped in the traditions of British political economy inclusive of those of English philosophers (Locke, Hume), not to mention the German Idealist tradition (Kant, Schelling, Fichte, Hegel), Marx, in very initial steps of tracing out the constitution of capital, speaks of the *universal* character of laboring activity without ever identifying or referring to the subject of that activity. This subject is neither universal nor individual (as our description of features that do *not* belong to that which differing exchange-values have in common might otherwise suggest); rather, this subject is a community of sentient, living, breathing workers *forcibly* brought together in work (whether or not they have internalized their common situation and consciously constitute a community, or they are a mere serial collective of individuals who objectively share that common situation, work in a factory).

Second, these abstractions... concrete labor, abstract labor... are formed... come into being and take shape... in the laboring activity of capitalism. To say so may appear obvious, but it is important to point this out because they are formed *violently* - no one willingly embraces eighteen, sixteen or even twelve hour days, six often seven days a week of difficult, numbing and exhausting labor with its physiologically destructive consequences, the suffering and misery it engenders, its abysmally inadequate "remuneration," the possibilities of genuine life and living that are sacrificed

³⁴„Gesellschaftlich notwendige Arbeitszeit ist Arbeitszeit, erheischt um irgend einen Gebrauchswert mit den vorhandenen gesellschaftlich-normalen Produktionsbedingungen und dem gesellschaftlichen Durchschnittsgrad von Geschick und Intensität der Arbeit darzustellen.“ *Ibid.*, I, 1.1: 41.

and lost. *These abstractions are constituted violently in production*, against the wills of those agents subjected to them.³⁵

Third, beginning from the commodity and concluding with social classes, we argued above the organization of *Capital* categorially elaborates the existential determinants of society's intelligible structure, describing the movement of a *real, yet false subject*, capital. (It is *false* because the social totality, capitalism, is false).³⁶ Rarely, if ever theoretically explicated in *Capital*, underlying the entire movement is the activity of productive subject (At times in *Capital*, and in the *Resultate*, Marx calls it "living labor"). This could not be clearer than in the *Resultate* where, transcending all confusion of capacity to labor (*Arbeitsvermögen*) and living labor (*lebendige Arbeit*), Marx states, "...the capitalist has purchased capacity to labor with the other part of the sum of money he has advanced... it appears that he has bought living labor. This therefore belongs to him just as much as do the objective conditions of the labor process. This, however, holds good with the following specific difference: Real labor is what the worker really gives the capitalist as equivalent for the part of the capital that has been transformed into wages, for the purchase price of labor. *It is the expenditure of his life force, the realization of his productive capacities, his movement, not the capitalist's.*"³⁷

Social, historical, logical or theoretical, whatever, living labor is not a mere premise. The activity of the productive subject at every moment supports this real, yet false subject; without it, *without the ongoing, ceaseless exploitation of living labor, without the violence and repression of the production processes and the transformation of concrete into abstract labor, capitalism would collapse*. And these designations, productive or living labor, too are abstractions, though conceptual (ideal) not real, not achieved in the violence of production. Again, it is the activity of a community of living, sentient workers, proletarians engaged in abstract labor subject to the extraction of a surplus of value, that underpins capitalism...

³⁵And the violence, thus the constitution of the real abstraction, is ongoing and ceaseless: It is not just through long, exhausting hours; it is relentlessly pursued by capital and its personifications through the imposition of machine rhythms, speed-ups and production norms, and on the basis of arbitrary supervisory behavior.

³⁶The social totality (capitalism) is false: Immanently, it conceals possibilities for a qualitatively different life, while simultaneously *utterly entropic* it is irreparably consuming and destroying its own foundations in earthly nature, and with it living beings.

³⁷"... hat der Capitalist mit dem andren Theil der vorgeschloßneo Geldsumme Arbeitsvermögen... daß dieß erscheint, lebendige Arbeit gekauft. Diese gehört ihm daher ebensowohl, wie die objektiven Bedingungen des Arbeitsprocesses. Aber dennoch macht sich hier folgender spezifischer Unterschied geltend: Die wirkliche Arbeit ist das, was der Arbeiter dem Capitalist wirklich giebt als Equivalent für den in Arbeitslohn verwandelten Theil des Capitals, für den Kaufpreis der Arbeit. Es ist die Verausgabung seiner Lebenskraft, die *Verwirklichung seiner productiven Fähigkeiten, seine Bewegung, nicht die des Capitalisten.*" *MEGA II.4.1. Ökonomische Manuskripte, 1863-1867. Resultate* („Kapitalistische Production als Production von Mehrwerth"), 58. Emphasis added, Marx's deleted.

Commodity Fetishism, Mystification and Anonymously Functioning Subjectivity

Summary Analysis (Volume 1, Chapter 1.4)

"A commodity appears at first sight an extremely obvious, trivial thing. But analysis brings out that it is a very strange thing, abounding in metaphysical subtleties and theoretical niceties."³⁸

It is not the use-value that is odd or obscure; in Marx's example, product of human labor a table is made of wood and constructed functionally, i.e., in accordance with use dictated by human need (or desire). It's a sensible object, "an ordinary, sensuous thing."³⁹ Nothing out of the ordinary here.

It is only when the table appears, is apprehended as, a commodity, that "it changes into a sensuous yet supersensuous thing."⁴⁰ If there is something strange here, and if it does not arise from its use-value, it doesn't rise from its exchange-value considered quantitatively either: So much labor measured in time is required to manufacture it. Easy enough. So wherein lies its puzzling character? Actually it's everywhere present, as the relations between workers, wherein the social features of their labor is expressed, directly and immediately appear to all us, as denizens of societies of capital, in the form of a social relation between the products of our labor.

"The mysterious character of the commodity-form consists... simply in the fact that the commodity reflects the social characteristics of men's own labor as objective characteristics of the products of the labor themselves, as the socio-natural properties of things."⁴¹ The commodity-form "is nothing but the definite social relation between men themselves which assumes here, for them, the fantastic form of a relation between things." Marx calls this fetishism; others (Lukacs, Goldmann, Debord, Vaneigem too) use the term reification.⁴²

What is at stake here is, of course, the social totality. The crucial question is, "From whence does fetishism originate?" According to Marx, "This fetish of the commodity world rises from the peculiar social character of the labor which produces commodities.

"For that matter use-objects become commodities only because they are the products of the labor of private individuals operating independently of each other."⁴³

How is it that workers in production are "private individuals" "operating independently of each other"?⁴⁴ In point of fact, factory work as the earliest form of real domination in production and assembly work under conditions of continuous flow production are the great *socializing* experiences that are crucial in the formation of workers as a class agent.

How, then, is it possible that "producers" don't "come into social contact" until they "exchange the products of their labor"? How is it possible unless, of course, the term "*producers*" does not refer to workers at all, but, assuming the standpoint of capital, instead refers to those in a position to "exchange the products of their labor," i.e., the capitalist who, proprietor of property, owns the products of workers' labor and, colloquially speaking, takes them to market. (While the propertyless wage-earner, the worker, exchanges her capacity to labor for the wage, that capacity is not something which is a product of her labor, it does not create itself in producing, but is given with her humanity once she has, historically, been stripped of means and materials of production.)

We would like to suggest something else here, namely, that the fetish of commodities (reification) it is itself a specification of all more general situation.

³⁸„Eine Ware scheint auf den ersten Blick ein selbstverständliches, triviales Ding. Ihre Analyse ergibt, daß sie ein sehr vertracktes Ding ist, voll metaphysischer Spitzfindigkeit und theologischer Mucken.“ *Das Kapital*, I, 1, 4: 70.

³⁹„Er ist ‚ein ordinäres sinnliches Ding.‘“ *Ibid*.

⁴⁰„...verwandelt er sich in ein sinnlich übersinnliches Ding.“ *Ibid*.

⁴¹„Das Geheimnisvolle der Warenform besteht also einfach darin, daß sie den Menschen die gesellschaftlichen Charaktere ihrer eigenen Arbeit als gegenständliche Charaktere der Arbeitsprodukte selbst, als gesellschaftliche Natureigenschaften dieser Dinge zurückspiegelt.“ *Ibid*, 71.

⁴²Marx refers to „ihrer physischen Nature und den daraus entspringenden dinglichen Beziehungen“ (“its,” the commodity’s, “physical nature and the reified relations springing from it.” *Ibid*, 86). What is at issue is Marx’s choice of the “physisch” and the translators’ choice of the term “material” for *dinglich*, both Fowkes and Moore and Aveling, with its physicalist connotations (which Marx himself promotes with his repeated reductionist examples, e.g., of optic nerve, the impression made on it, subjective excitation of that eye, the light transmitted to it, and its overall characterization as a “physical relation between physical things.” *Ibid*.) • The term “material” is a translation of the German *dinglich*, i.e., *thingly*. Thus, reification.

⁴³„Dieser Fetschcharakter der Waarenwelt entspringt... aus dem eigenthümlichen gesellschaftlichen Charakter der Arbeit, welche Waaren producirt.“

„Gebrauchsgegenstände werden überhaupt nur Waaren, weil sie Produkte von einander unabhängig betriebener Privatarbeiten sind.“ *Das Kapital*, I, 1, 4: 72.

⁴⁴„Privatarbeiten“ is literally “private laborers” which puts one in the mind of independent craftsmen taking their products to market, a situation in which fetishism would not arise but which is nonetheless fully with the analysis of simple reproduction in *Kapital*, I.

* In *The Materialist Dialectic*, Appendix (*The Critique of Reductionism in the Sciences of Man*), we offer a withering critique of just this type of physicalism regurgitated by Marx (in the form of the constancy hypothesis, the assertion of a one-to-one correspondence between events of the “external” world, here “the thing outside the eye” and an “interior world,” here “the optic nerve”).

Stated unambiguously, Marx sees the basic situation arises from circulation. Thus, he says, "Since the producers do not come into social contact until they *exchange* the products of their labor, the specific social character of their private labors appears only *within this exchange*. In other word, the labor of the private individual manifests itself as an element of the total labor of society only through the relations which the act of *exchange* establishes between the products, and, through their mediation, between the producers."⁴⁵ *Fetishism is not, however, the basis situation. Rather, it is a specification of a more fundamental situation which arises from production. Mystification is that fundamental situation.*

Mystification is a general feature of capitalism broadly speaking, and has a very specific structure, because *it inheres in the production process of capital itself, i.e., because it is arises out of the objective relation between actual agents in production.*

The general problem arises, without regard to the character (formal or real) of capitalist control in the work process, from the simple fact that this work process, its materials, its products, equipment, workshop or plant, in a word, the production process as a whole, is not only *not subject to the worker but to the contrary she is subject to it*. Thus, for instance, capital as money, i.e., as thingly, appears as purchaser of the capacity for labor, women and men in flesh and blood, and sets it to work. This is the basic situation.

As a specifically capitalist form of mystification in the form of reification or fetishism, literally thing-ification, that is, the appearance of the personified things and thingified persons, will arise with the appearance of the capitalist, no longer a mere merchant, as an industrialist, i.e., once the capitalist intervenes directly in production, either by reorganizing the labor processes or by introducing machinery (or both), for it now that he appears as an active agent. In the convoluted world of capitalist development, the movement of capital and its moments, e.g., commodities, are historically constituted real abstractions that now appear as social relations among things. The social relation(s) among agents in production, workers, on the other hand, appear as objective characteristics or natural properties of these things that actually are products of workers' labor. In fact, the capitalist, a passive consumer of expenditure of the life's energies of living labor, is active but only to that extent he assimilates and internalizes, then assumes, the role of and functions as capital in production, for it is only in breathing life into a social relation which itself appears thingly, only in *personifying* capital, that the capitalist appears as agent. Yet this is just one more inversion in a world that remains upside down (*verkehrte Welt*), for:

Under real domination, that is, as capitalism develops on its own foundations, all production increasingly becomes the production of commodities. At a certain point, the commodity is the universal social form in which all goods appear: Vast numbers of workers enter the arena of production, the social configuration of work (its form of organization), the enormous raw material resources production presupposes and whose organization as such transcend the conditions of any specific group of workers' immediate labor, the vast mechanical apparatuses of production, and its geographical extent now all confront labor as capitalistically arranged and *imposed* on it. Because capital itself has historically called this total ensemble of relations, conditions and means of production into existence, *it is internal to and inseparable from this system of social relations*. All this, then, which effectively constitutes (capitalist) society's objective substance, that is, that which provides it with duration (if not permanence) in the ebb and flow of becoming and passing away (in the infinite becoming forming *natural* movement and within which humanity is situated), in other words, real societal wealth (grasped capitalistically), appears to be call forth, not merely independently of labor, but specifically at the behest of capital, as product and outcome of its movement, a movement of which labor itself appears as a mere moment. *Mystification generally and fetishism specifically here are objectively necessary illusion*. As Marx states, "Value... does not have its description branded on its forehead; it rather transforms every product of labor into a social hieroglyphic."⁴⁶

As a real moment in this entire process, serial machinery (continuous flow or the assembly line form of production) renders mystification, more unavoidable, and more deeply rooted in the work process. Living labor confronts the machine technology-centered work process as a ready-made alien objectivity, as a social power that dominates it, subsumes it, and is hostile to it. "Labor" now appears from the start as an abstraction, merely as a cog situated at many points of the mechanical system, yet borne by isolated living workers. In machine technology, the "value-creating activity [of living labor]... valorizes capital" but to the extent machinery develops with the development of the mastery (domination) of nature and knowledge of said domination (science), "the development of the social productive powers of labor and the conditions for this development appear as the activity of capital," while the production process itself appears to a result of the "conscious *application of technology*"⁴⁷ (emphases in original). Yet

⁴⁵Da die Produzenten erst in gesellschaftlichen Kontakt treten durch den *Austausch* ihrer Arbeitsprodukte, erscheinen auch die spezifisch gesellschaftlichen Charaktere ihrer Privatarbeiten erst *innerhalb dieses Austausches*. Oder die Privatarbeiten betätigen sich in der Tat erst als Glieder der gesellschaftlichen Gesamtarbeit durch die Beziehungen, worin der *Austausch* die Arbeitsprodukte und mittelst derselben die Produzenten versetzt. *Ibid* (emphases added).

⁴⁶Es steht daher dem Werte nicht auf der Stirn geschrieben, was er ist. Der Wert verwandelt vielmehr jedes Arbeitsprodukt in eine gesellschaftliche Hieroglyphe." *Ibid*, 73.

⁴⁷Die "Wertsgaffebede Tätigkeit des Capital verwerthet" *MEGA II.4.1. Ökonomische Manuskripte, 1863-1867. Resultate* („Produktive und Unproduktive Arbeit“), 112; „so erscheint die Entwicklung der gesellschaftlichen Productivkräfte der Arbeit und die

the utilization of machine technology, which of necessity can only be collectively used, absolutely presupposes the collective labor of workers. Mystification, grounded in the forms of the appearance of daily work itself, finds its apotheosis in the technology of serial machinery. The capitalist, to the extent he willingly and consciously represents capital, and only to that extent, appears active, expansive, creative; the worker, engaged in the production of value on the basis of simple, repetitive, and inwardly meaningless tasks, appears passive. She produces within herself an indifference to work, a paradoxically active dissociation from self. In producing, the worker reproduces herself in dual form, as anticipatorily active outside and beyond labor, while actually passive at labor, that is, as subjectively mutilated, as abstract, indifferent, bored, as a *Teilmensch* with vastly truncated possibilities of fulfillment in and through work.

In the work process, in expending capacity for labor to reproduce themselves, workers reproduce their own domination and exploitation: They are unwittingly committed to their own reduction and abstraction (while simultaneously struggling against it). Effectively, the labor process as the production of use-values is a mere instrument of the valorization process as the self-formation of capital. Here the original form of mystification, grounded on the basic model of domination, develops: *The intelligible structure of this process as it immediately appears is inverted.* In the valorization process, persons are subordinated to things (as use-values), things dominate persons. This *inversion, as the primordial form of mystification* constituted as such in the very production process itself, rests on the specific form of the domination of capital over labor that is constitutive of this process. In the unity of the labor and valorization processes, the activity of labor is contradictory: It, *anonymously functioning subjectivity (living labor)*, enters a production process and produces products over which it has no control, which confront and dominate it as an alien objectivity, in order to reproduce itself as such, as living labor, i.e., it produces and in producing renders itself a passive object for capital. *The transformation of the subject into an object for capital while remaining a subject, that is, consciously acting and producing (bringing forth something new, i.e., something not present at the beginning of the process), the transformation of the concrete into the abstract, is the basic form domination takes in production. It is precisely this form, the fundamental model of domination as such, that the mystifying inversion characteristic of capitalist production conceals.* Accordingly, *this inversion as such is, then, implicitly or primordially ideological.*

The tendency of capital with its voracious appetite for surplus-value is to cannibalistically extend its sway beyond production of life's necessities and to subject all social relations to productive ones, first to introduce waged labor relations in order to commodify the diverse domains of daily practice, then to rationalize and finally to spectacularize them. Capital insinuates itself into the most intimate and private domains (family life, sexuality) and the hidden recesses of personal life (dreams, fantasy, the buried pains of childhood) all in order to ever anew create markets in order to relieve the pressures of excess capacity and to avoid overproduction. Precisely because our immediate intuitions of reality (as well as their systematizations) originally arise on the ground of our daily practices, and because capital has subjugated the social relations constituted in these practices, *the movement of capital necessarily mystifies all reality.*

Money, the Circulation of Commodities, and the Transformation of Money into Capital

Part I

The Circulation of Commodities (C-M-C) (Volume 1, Chapter 3)⁴⁸

Consider the fate, if you will, of a use-value.

A waged worker exchanges her labor-power, a commodity, for money, which she in turn purchases bread, milk and so on in order to sustain herself, or in Marx's language, to reproduce her labor-power. Admittedly, as we shall discover, labor-power as living labor commodified is a very usual, a unique, commodity, but the formal movement of the commodity, any commodity, has the same structure, which can be represented as C-M-C, where C stands for the commodity and M for money. Like any commodity that is purchased as a use-value once the commodity bread or milk has been purchased, it is consumed. Purchased for its use-value, bread, milk or any commodity *disappears* in its use. The situation with an exchange-value is, though, different.

If we consider exchange-value, we recognize that the quantitative commensurability of any given (number of) exchange-values demands some third, that formally identical (i.e., itself a commodity), which functions in exchange as a measure of values, which "represent[s] their values as magnitudes of the same denomination, qualitatively equal and quantitatively comparable."⁴⁹

Marx explicitly assumes gold is the money commodity. He does so for the sake of simplicity. We shall not, for historical reasons which have everything to do with the significance of banking and finance in the world we live in, a role that Marx, though he grasped the role of credit in the expanded reproduction of capital better than anyone before him or better than any of his contemporaries, could not have foreseen.⁵⁰

Money is a universal measure of values. It can only function as such because all commodities as values embody objectified human labor. It is only because under conditions of capitalist production objectified and materialized human labor is homogeneous, thus that commodities themselves are commensurable, that values can be measured in one, self-same commodity, and that, furthermore, this commodity can function not just as a common measure of their values but as a universal one, i.e., as money. As such, money is the "necessary form of appearance of this measure of value immanent to commodities," to, in other words, labor time.⁵¹

The monetary expression of the value of a commodity is its money-form or its price. Like value generally, the money-form or price of commodities is clearly to be distinguished from the sensuous, bodily form, the commodity just as it is given in perception. It (price) is ideal, though value monetary expressed by price is borne by, immanent to, bread, milk or any commodity.⁵² As a measure of value, money itself is the social embodiment of homogenized, temporally quantified, objectified and materialized human labor (i.e., abstract labor).

For money to appear already means commodities are exchanged. "Commodities first enter into the process of exchange ungilded and unsweetened, just as they are."⁵³ The formal movement of this exchange is represented, as

⁴⁸In this chapter, Marx makes either tacit reference... to that of fixed weight of a quantity of metal (gold) service as a standard of price (*Das Kapital*, I, 3.1: 93), to money-names and the law and the state that establishes them (*Ibid*, 95)... or express reference... to coin, its denominations and minting (*Ibid*, I, 3.2c: 116-117), to the metallic content of gold and silver (*Ibid*, I, 3.2c: 117), to issuance of non-convertible paper currency (*Ibid*, I, 3.2c: 118)... to the state, and to bourgeois law as the overarching framework in which money flows into (his favored term is the verb, *hineinwerfen*, "to throw into") circulation to facilitate the movement of commodities. But law of a very specific kind is absolutely central to the formation of capital as capital, and the emergence of capitalism. We shall pursue this textually in our concluding discussion of Part II (chapter 6), pertaining to the historical premises of labor-power as a peculiar commodity capable of generating a surplus of value.

⁴⁹...die Warenwerte als gleichnamige Größen, qualitativ gleiche und quantitativ vergleichbare, darzustellen." *Ibid*, I, 1, 3.1: 90.

⁵⁰See "The Historical Shift from Production Investment to Speculate Finance" and "The Role of the Central Bank and the State," both below.

⁵¹... notwendige Erscheinung des immanenten Wertmaßes der Waren." *Ibid*, 90.

⁵²*Ibid*, 91.. (We deploy the term "perception" in the Husserlian phenomenological sense, referring to the activity of any of the senses and not merely to seeing alone.)

Marx says that *price* is ideal, imaginary or notional. There are different ways to read and understand this; for example, David Harvey (*A Companion to Marx's Capital*, Vol. I, London, 2010: 58-59) believes that one takes a commodity to market, one "hangs" a price on it (another may do similarly), but until it is actually sold one has no idea what its value in the market is. It is market conditions, i.e., the number of sellers and actual buyers (supply and demand) determine price. So that a relation between one's notional price and actual price fetched in the market establishes the price, ideally, indicating true value. This is moot, an economist's way of explaining matters, debatable in Harvey's case, and from the standpoint of the *critique* of political economy uncertain in Marx's...

So, again, Marx says that *price* is ideal, imaginary or notional... and though supersensible (here he says "invisible," *unsichtbar*), he wants to say (he doesn't) *value* is nonetheless real. We think price is "real" with respect to the daily operation of capital, it is real as appearance (in both Hegel's and Marx's sense) - and such for all classes of society. But with respect to the *intelligibility* of capitalism as a (global) system of social relations that mode of reality, appearance, is deficient, while value is essential and determinant (Marx) or actual (Hegel).

⁵³"Die Waren gehn zunächst unvergoldet, unverzuckert, wie der Kamm ihnen gewachsen ist, in den Austauschprozeß ein." *Das Kapital*, I, 3.2a, 99.

we noted above, as C-M-C. Exchange is and remains a single process, even as it "produces a differentiation of the commodity into two elements, commodity and money."⁵⁴ This is an opposition reproducing in novel form the opposition of use-value and value immanent to it. In this process as unitary, use-values, commodities, are opposed to exchange-value, money. While a single process, in the movement the commodity undergoes a change of form, a metamorphosis, from commodity to money and back to commodity again, and thus it in fact undergoes two metamorphoses.

State the entire set of relations differently:

The movement of exchange is a single, yet two-sided, process, and within it has two opposing poles; first, the conversion of a commodity into money is at the same time the conversion of money into a commodity (its two-sidedness); then, one pole, C-M, is the sale and the other, M-C, is the purchase (its opposing poles). The completed metamorphosis as a whole is formed by two opposing yet complementary movements. Each moves in the opposite direction, thus the two poles are antithetical or, dialectically, contradictory.⁵⁵

Materially, the movement is simply represented as C-C, an exchange of one commodity for another, what Marx calls the "metabolism of social labor."⁵⁶ Here the process disappears. But not so with the process of circulation, commodity movement in its formal aspect, where mediated by money use-values exchange hands. Now as use-values, the commodities, disappear in consumption, the process of circulation has a residue, the money (commodity) which ends up in hands of some third person, in our example above, in the hands of the producer (retailer) of bread or milk. "Circulation," as Marx rather wittily remarks, "sweats money from every pore."⁵⁷ It is necessary, then, to consider the circulation of money.

We've established that money is the measure of value. At the same time, it a means of circulation, intended to facilitate and expand the exchange of commodities. *The effectiveness of the one is at odds with the efficiency of the other, and vice versa.* This *contradiction* is best apprehended by way of an illustration. Something contemporary. The example we'll offer obviously does not belong to Marx, but it is not simply ours. Anyone who has reflectively considered events that begun a mere dozen years ago will be familiar with it.

Consider the financial crisis (2008), and the response of the state and central bank to it, especially in the United States but elsewhere also. First, there were the bailouts (AIG, GM, and the great banks). The banks concern us the most because the money the Federal Reserve loaned (at no interest), aggregately over a trillion US dollars, was, besides just keeping the banks afloat, expressly designed to "increase liquidity," to keep the financial markets from "freezing up" (refusing or unable to lend) which was obviously the situation confronting the financial "community" as a whole in October-November 2008. Since then, the same institution (Federal Reserve)⁵⁸ has not once (Nov 2008-Jun 2010 or twice (Nov 2010-Jun 2011), not three (Sept 2012-Oct 2014), but on four occasions (Sept 2019 and currently, still ongoing) pursued a practice known as "quantitative easing." The practice involves central bank purchase of government bonds (in the US, Treasuries), the debt in the form of bonds of other agencies within the state (in the US, Fannie Mae for instance), and even the stock of private corporations. Simultaneously, the central bank suppresses interest rates by holding its own rate (given to only a handful of great banks) at near zero (known as zero interest rate policy, "zirp"). The policy is ostensibly designed to increase the excess reserves of the large banks, facilitating an increase of private bank lending. These practices entailed huge, dramatic increases in the central bank's "balance sheet" (i.e., statement of holding), doubling, tripling and in the most recent (fourth) occasion, increasing by as much as an order of magnitude banking "assets," since adding these new assets (i.e., liabilities, some worthless) was done without "sterilizing" the account, that is, without corresponding existing asset sale (subtraction from the balance sheet).

So here is an instantiation, quantitatively the largest in the history of banking (capitalist or otherwise), of the use of money as a means of circulation intended to facilitate and expand the exchange of commodities.

If we now consider the response of a current among bourgeois economists, nearly all macro-economists (who discovered their rightwing "libertarian" and Austrian school roots... Mies, von Hayek... in these events), it has been uniform. The first bailouts in autumn 2008, and especially the first round of quantitative easing, created "moral hazard," i.e., those financial institutions who engaged in risky speculation (bundling and reselling mortgage securities in the housing market (phenomenally) said to have been causative in the financial crisis, collateralizing other debt obligations, hedging bets on the viability of specific equities (derivative creation), etc) were provided genuine evidence, leading to unshakable conviction, that the Federal Reserve would bail them out, "making them whole," no matter how risky the investment they engaged in, setting up a situation in which there was no "downside" as the fiat money released in quantitative easing led to huge investment in "safe" stocks (the FAANGS)⁵⁹ pumping up the valuations of these stocks and with it (i.e., with the amounts of money poured into the stock market) the stock

⁵⁴ „Er produziert eine Verdopplung der Ware in Ware und Geld.“ *Ibid.*

⁵⁵ *Ibid.*, 99, 102, 104.

⁵⁶ „Stoffwechsel der gesellschaftlichen Arbeit.“ *Ibid.*, 100.

⁵⁷ „Die Zirkulation schwitzt beständig Geld aus.“ *Ibid.*, 106.

⁵⁸ And the Bank of England, European Central Bank, the Bank of Japan and the People's Bank of China all as well.

⁵⁹ Facebook, Apple, Amazon, Netflix, and Google.

exchange as a whole, sending the Dow Jones soaring. Stemming from central bank practices, the entire situation destroyed the very possibility of "marking to market," creating a condition in which "price discovery" became impossible.⁶⁰ In other words, ascertaining the price, thus the monetary expression of value, of commodities is no long feasible: In the example to hand, *facilitating the exchange of commodities by expanding the circulation of money made it impossible for money to function as a measure of value*. In this extreme case, the contradiction between money as a means of circulation and as a measure of value is brought into sharp focus.

Price and value, as a rule, do not coincide. "With... the maturation of commodity circulation, conditions develop under which the alienation of the commodity becomes separated in time from the realization of its price."⁶¹ I wish to purchase large quantities of commodity *x*. No manufacturer of *x* has the productive capacity to immediately satisfy my requirements. It will take several months to produce *x* in the quantities I require. I sign a contract with a manufacturer who has productive facilities in eastern North America and western Europe, the latter of which are far larger. The contract not only specifies quantity and price, but also includes detailed characteristics, shape, weight, construction material, etc., of commodity *x*. Though my operations are in central North America, I take delivery now of what amounts to one-half of the total quantity of commodity *x* I wish to purchase from the western European plant. (The North American plant has an existing inventory only a third as large.) I place 25% down in advance, and agree to pay 15% when the first half of the total quantity of commodity *x* arrives from western European. (Contractually it is agreed I can withhold 10% for one additional week in order to insure that the past production of commodity *x* meets my specifications.) The balance of the contractual price is due upon thirty days after I have received the balance of my order of commodity *x*. As can be seen in this example, the "alienation of the commodity" is separated by a temporal interval on three occasions from the "realization of price." In first case, I, as purchaser, am actually a creditor, advancing 25%; but in the latter, two cases, the seller becomes a creditor as I withhold 10% after initial receipt, and then again he advances me "credit" for thirty days after final receipt. In the latter two cases, "The seller becomes a creditor, the buyer becomes a debtor. Since the metamorphoses of commodities, or the development of their form of value, has changed here, money receives another function as well. It becomes the means of payment."⁶²

Here we need to follow Marx closely. He returns to circulation, noting the two equivalents, commodity and money, no longer appear at one and the same time at the two poles of the process of sale; instead, money while now functioning as before as a measure of value in determining the price of the sold commodity, also serves as a "nominal means of purchase. Although existing only in the promise of the buyer to pay [actually in our case there is a down payment, but also note the 10% and the thirty days, which are contractual promises to pay], it causes the commodity to change hands."⁶³ Thus, it is not until after that payment in both of the latter instances (of commodity *x*, our example) that money, the means of payment, actually enter circulation, leaving my hands for those of the manufacturer. The circulating medium, thereby, "was transformed into a hoard because the process halted after the first phase," C-M. "The means of payment," money, "enters circulation, but only after the commodity has already left it."⁶⁴ Money then, Marx says, no longer mediates the process of circulation. "It brings it to an end by emerging independently, as the absolute form of existence of exchange-value, in other words, the universal commodity. The seller turned his commodity into money in order to satisfy some need; the hoarder in order to preserve the monetary form of his commodity, and the indebted purchaser in order to be able to pay." Marx concludes, "*rising from the socially necessary conditions of the process of circulation itself, the value-form of the commodity, money, has now become the self-sufficient purpose of the sale*"⁶⁵ (emphasis added).

There is a shift here, not so much in perspective, but in the objective course of the movement of money as it functions in circulating commodities. It is not visible in our example or in any instantiation taken in isolation. While our manner of expression may suggest that shift is one of perspective... from a single transaction as whole to the aggregate totality of transactions that constitute exchange... the shift we are referring to can be seen in its outcome, that is, with respect to the intelligibility to which this movement rises (the movement of capital): "The chain of payments, or

⁶⁰In contrast with historical cost accounting, which maintains an asset's value at the original purchase cost, mark to market is a method of ascertaining the "fair value" of stocks which fluctuate over time, providing a realistic assessment of a firm's current financial situation based on current "market conditions." Based on the movement of publicly traded stocks over time, "price discovery" is merely the recognition of that "real," or "fair" "market value" of a stock, thus, of the firm which issued it.

⁶¹"Mit der Entwicklung der Warenzirkulation entwickeln sich jedoch Verhältnisse, wodurch die Veräußerung der Ware von der Realisierung ihres Preises zeitlich getrennt wird." *Das Kapital*, I, 3.3b: 125.

⁶²"Der Verkäufer wird Gläubiger, der Käufer Schuldner. Da die Metamorphose der Ware oder die Entwicklung ihrer Wertform sich hier verändert, erhält auch das Geld eine andre Funktion. Es wird Zahlungsmittel." *Ibid*.

⁶³"Es funktioniert zweitens als ideelles Kaufmittel. Obgleich es nur im Geldversprechen des Käufers existiert, bewirkt es den Händewechsel der Ware." *Ibid*, 126.

⁶⁴"Das Zahlungsmittel verwandelt sich in Schatz, weil der Zirkulationsprozeß mit der ersten Phase abbrach.. Das Zahlungsmittel tritt in die Zirkulation hinein, aber nachdem die Ware bereits aus ihr ausgetreten ist." *Ibid*.

⁶⁵"Es schließt ihn selbständig ab, als absolutes Dasein des Tauschwerths oder allgemeine Ware. Der Verkäufer verwandelte Ware in Geld, um ein Bedürfnis durch das Geld zu befriedigen, der Schatzbildner, um die Ware in Geldform zu präservieren, der schuldige Käufer, um zahlen zu können... Die Wertgestalt der Ware, Geld, wird also jetzt zum Selbstzweck des Verkaufs durch eine den Verhältnissen des Zirkulationsprozesses selbst entspringende, gesellschaftliche Notwendigkeit." *Ibid*.

subsequent first metamorphoses, which participate in the process" as in all the creditors A who receive money from debtors B, who in turn pays his creditor C and so on back down a line of creditors, taken together with the time, the temporal gap, between all moments at which payment, being due, is made, "is essentially different from that intertwining of the series of metamorphoses," C-M, considered above. Why? Because the "flow of the circulating medium does not merely express the connection between buyers and sellers: The connection itself arises within, and exists through, the circulation of money."⁶⁶

There are several consequences to consider:

First, already present in nuce there is the possibility, actually the necessity, of the issue of credit with all its attendant institutions, i.e., the constitution of a credit system, developing out of the movement of money as the money commodity. "As the system of credit expands, so does function of money as a means of payment. As such it takes on its own peculiar forms of existence."⁶⁷

Second, there is movement itself, M-C-M. No one extends credit without a return. (Even in the case which does not involve institutions of credit, where one capitalist, a seller, gives another terms, e.g., in our example the thirty days before payment comes due, the "cost of money," that is, the cost of permitting the buyer to incur the thirty days foregoing payment upon reception of goods, is incorporated into the price of the commodity.)⁶⁸ In other words, any credit system is financially sustained by the increment, ΔM , thus $M + \Delta M$ or M' , which renders the representation of the movement of money as M-C-M'.

Third, reaching back to the dual nature of the commodity (itself our point of departure), all the contradictions are taken up at each level of analysis, itself expressing a real movement:

"There is an antithesis, immanent in the commodity, between use-value and value, between private labor which must simultaneously represent itself as directly social labor, and a particular concrete kind of labor which simultaneously is regarded as merely abstract universal labor, between the personification of things and the reification of persons: The antithetical phases of the metamorphosis of the commodity are the developed forms of movement of this immanent contradiction."⁶⁹ All of this is taken up in the exchange of commodities, present if latent in their circulation, as the contradictory character of their movement and exchange; the generation of a medium of that exchange, money; its mediation of that exchange (dual, contradictory functions as a measure of value and a means of circulation); its role as a means of payment, hence its universality and thus the "winning" of its own independence; all taken up anew in that "space" that opens up in "time," the movement of money as it mediates the circulation of commodities exhibiting that independence in first, in the extension of credit, then its hardening (institutionalization).

Fourth, only tacit at this point, it is here in the movement of money, that is in the circulation of commodities mediated by money and its contradictions, that circulation of capital emerges. An account of this emergence is a promise yet to be redeemed.

Part II

The Circulation of Money (M-C-M'): Money, Capital, Labor-Power and the Premises of its Historical Formation (Volume 1, Chapter 4)

In a formal sense, the "final product" (*letzte Produkt*) of the circulation of commodities is money. This product is the first form in which capital appears.

Marx tells us, historically, capital first confronts landed property as money, as monetary wealth, namely, as merchants' and usurers' capital.⁷⁰ This is not Marx's final position on the matter, merely, we might say, an opening

⁶⁶Die prozessierende Kette von Zahlungen oder nachträgliche ersten Metamorphosen unterscheidet sich wesentlich von ... der Metamorphosenreihen. Im Umlauf des Zirkulationsmittels wird der Zusammenhang zwischen Verkäufern und Käufern nicht nur ausgedrückt. Der Zusammenhang selbst entsteht erst in und mit dem Geldumlauf." *Ibid*, 127.

⁶⁷"...wie sich das Kreditwesen aus-dehnt, so die Funktion des Geldes als Zahlungsmittel. Als solches erhält es eigne Existenzformen..." *Ibid*, 12

⁶⁸You say, "no. That was not Marx's intent." We response, perhaps but this is what capitalists do: We ourselves ran firms and this was precisely the way, consciously, we calculated contractually negotiated price.

⁶⁹Der der Ware immanente Gegensatz von Gebrauchswert und Wert, von Privatarbeit, die sich zugleich als unmittelbar gesellschaftliche Arbeit darstellen muß, von besondrer konkreter Arbeit, die zugleich nur als abstrakt allgemeine Arbeit gilt, von Personifizierung des Sache und Versachlichung der Personen—dieser immanente Widerspruch erhält in den Gegensätzen der Warenmetamorphose seine entwickelten Bewegungsformen." *Ibid*, I, 3.2a: 106.

⁷⁰Taken abstractly, this is wrong, as Marx well knows, for it cannot explain the rise of capitalism, where capital is comprehended as self-valORIZING value.

Here we must return to our initial frame of reference, properly posing the relation of history and system.

To uncover and disclose the intelligibility of capitalism, or any reality for that matter, the categories of analysis must arise from historical contents. They cannot be spun out logically, for real historical movement can well make a mockery of logical development of the categorical structure of analysis. So to with the origins of capitalism.

First, capital did *not* invariably at its origins confront landed property in the form of money: In the original centers where capital's formal domination epochally first took hold, i.e., in Florence, Barcelona, the *drie steden* and their immediate hinterlands, and in the towns at

proposition in a dialectic dance which transpires over the next three sections of chapter 4. Let's follow and see where it leads us.

Marx indicates the first distinction between money as money and money as capital is the difference, nothing more, in the form of circulation.

Consider the general formula of the circulation of money, M-C-M, the transformation of money into commodities and their conversion back into money. In a formal sense, it is structurally identical to the general formula for the circulation of commodities; that is, it has two antithetical phases, M-C and C-M, just as the circulation of commodities, C-M and M-C. The same two "agents" are involved in the former exchange, the buyer and seller, just as there is a seller and buyer involved in the latter, while in each complete transaction there are actually three participants, a seller only, a buyer only, and a third engaged in both buying and selling (the participant as middle term engaged in each general formula, C-M-C and M-C-M). Formally, there are correspondingly these differences: In each formulation there's an inverted order in the movement of circulation (each movement is in the opposing direction from the other), and still another inversion, in the one case money mediates the exchange and in the other it is commodities.⁷¹

There is, however, at least one significant difference between the two forms of circulation. In the case of commodity circulation, with the exchange of money for a commodity (M-C) the commodity disappears into consumption, the circuit is closed, as the purpose, intent and function of the exchange is the fulfillment of some need, in a single term, use-value. However, in the case of monetary circulation money returns to money, the purpose, intent and function of the circulation of money is exchange-value.⁷²

In the circulation of money, the points of departure and arrival are the same, money, not qualitatively different use-values since money is the form to which commodities are converted in order to facilitate the transaction. Accordingly, in the general formula, M-C-M, what distinguishes the two poles is their quantitative difference. (As it stands in the formula, each pole is indistinguishable from the other.)

In the practice of daily life, however, by way of commodity purchase and sale the exchange of money for money of

the center of the Champagne Fairs, those first confrontations were armed. "Merchants' and usurers' capital," i.e., merchants as well as bankers (and woolen manufacturers), leading citizens, worthies (*boni homines*) or grantees who had no "feudal" title, some with real military skill ("knights") self-organized to put an end to the constant harassment of trade, its plunder and detainment or capture for ransom of citizen merchants engaged in longer distant trade (and beyond) in the near countryside by petty feudatories, rural seigniors and lords, and the rowdy often drunken destruction of property (homes, shops) and assault on citizens in the city (Florence, above all) by the same. Accompanying the conveys of traders in and out of the city, the conflict unfolded over decades, and in the ebb and flow of clashes, skirmishes, and occasional battles, Florence, Barcelona, other large towns in the center of the Italian Peninsula, and the *drie steden* continued to prosper. The cities emerged victorious, and in some cases (notably Florence) some of these men formed the backbone and leadership of the early communal militias. (The Flemish case was somewhat different. There, peasant fled the core feudal zone to the south seeking relief from imposed labor services and work. There, an exceedingly weak centralized monarchy governed, as the Flemish counts engaged in internecine struggle existentially depended on consent from the great merchant assemblies of the cities (Bruges, above all Ghent) to secure their rule.) See Pasquale Villari, *The Two First Centuries of Florentine History* (London, 1905: 91-92, 102; the discussion of the Barcelona *Usages* by Robert Hughes, *Barcelona*. New York, 1990; Henriëtte Roland-Holst, *De revolutionaire massa-actie. Een studie*. Rotterdam, 1918; Chapter 3 ("De massa-actie in de opstand van de Nederlanden tegen het Spaanse gezag"); and, our reading of David Nicholas, *Medieval Flanders* (London, 1992), and his account of relations between the towns and early counts (William Clito, Thierry of Alsace), as well as his *Town and Countryside: Social, Economic and Political Tensions in Fourteenth-Century Flanders* (Brugge, 1971), in his discussion of the van Artevelde dictatorship, which was paradigmatic for the type of confrontation between the towns and comital lords.

Second, in all the highly significant cases (Florence, Barcelona and the *drie steden*) capital's epochal formal domination did *not* arise from the breakdown of feudal relations. Only the towns of the Champagne region were situated in the central feudal zone, a stretch of land defined by river borders running from the Loire to the Rhine. (Marc Bloch, *Feudal Society, I: The Growth of Ties of Dependence*. Chicago, 1961 (1938): xviii. In all other cases where capital's epochal formal domination first took hold, the cities and towns that were at the core of this development were hemmed in by rural lords among whom productive activity was based on varying regimes of labor-repressive landlordism. It is Marx's intellectual sycophants who as a rule hold otherwise, assuming without clarification, without any thought, that on the Iberian and Italian Peninsulas, in Flemish lands, and for the matter in Japan and Russia (where modern tributary forms were immediately antecedent to capitalism) social life was dominated by feudal productive relations.

Feudalism is present under the following historically specific conditions: Social dislocation and disruption of societal fabric creating fragmentation of political authority; the development of autarkic estates within an overwhelming rural society, estates in which production and governance are unified in the person of a lord, himself a warrior; supremacy of a social class of these warriors; constitution of *social relations of personal dependency as basic and operative at all social levels* (ties of obedience and protection binding men to men) which in production include a subject peasantry and within the warrior class assume a distinctive form called vassalage; and widespread use of service tenement (i.e., the fief). In his more insightful moments, Marx at least had the good sense to recognize this; thus, he refers to "the power of landed property, based on personal relations of domination and servitude,"* (*Das Kapital*, I, 4: 135, note) and he contrasts this to "the impersonal power of money," i.e., merchants' capital early in the epoch of capital's formal domination.

⁷¹*Ibid*, 136.

⁷²*Ibid*, 137.

* "...persönlichen Knechtschafts- und Herrschaftsverhältnissen beruhenden Macht des Grundeigentums und der unpersönlichen Macht des Geldes..."

identically the same quantity does not occur. "The objective content of the circulation we have been discussing... is his [the capitalist's] *subjective purpose*, and it is only in so far as the growing *appropriation of ever more wealth* in the abstract is the compelling motive behind his operations that he functions as a capitalist, i.e., as capital endowed with will and consciousness personified. Use-values must never be treated as the immediate aim of the capitalist nor must the profit on any single immediate transaction, to the contrary, he aims only at the incessant movement of profit-making. This *unquenchable drive for enrichment, this passionate hunt after value*, is common to the capitalist and the miser; but while the miser is merely a capitalist gone mad, the capitalist is a rational miser. The ceaseless augmentation of value... is achieved by the more clever capitalist by means of throwing his money again and again into circulation"⁷³ (emphasis added).

Marx says it is absurd to think otherwise: To exchange one sum by way of, say, the purchase of cotton for identically the same sum "is merely a roundabout way of exchanging money for money, the same for the same, and appears to be an operation as purposeless as it is absurd."⁷⁴ Instead, "In the end more money is withdrawn from circulation than was thrown into it in the beginning."⁷⁵ The formula for this is $M-C-M'$, where M' equals $M + \Delta M$, as noted above.

Following Marx we can identify this increment. He calls it *surplus-value*. "The value originally advanced,... not only remains intact while in circulation, but increases its magnitude, adds to itself a surplus-value, or is valorized." It is "this movement" which "converts it into capital."⁷⁶

If we go back to that "unquenchable drive for enrichment" and treat it in terms of the manner in which it appears, as an endless objective process, we have achieved a very preliminary description of the movement of capital: The "final result of each separate cycle, in which a purchase and consequent sale are consummated, forms of itself the starting-point for a new cycle."⁷⁷ In contrast to the circulation of commodities which ends with the satisfaction of need as the commodity disappears into consumption, "the circulation of money as capital is, on the other hand, its own purpose, for the valorization of value exists only within this constantly renewed movement."⁷⁸ Thus, the movement of capital, unceasing, is unlimited.⁷⁹ Marx calls this movement that of an *automatic subject*.⁸⁰ He is correct but for the wrong reason. Value may indeed be the subject of the valorization process, but, while assimilated and internalized - the capitalist's "subjective purpose" and his "compelling motive"⁸¹ of wealth appropriation, valorization does not encompass society as a whole. With respect to society's intelligibility it is *capital* which in and through its movement

⁷³„Der objektive Inhalt jener Zirkulation... ist sein *subjektiver Zweck*, und nur soweit *wachsende Aneignung des abstrakten Reichtums* das allein treibende Motiv seiner Operationen, funktioniert er als Kapitalist oder personifiziertes, mit Willen und Bewußtsein begabtes Kapital. Der Gebrauchswert ist also nie als unmittelbarer Zweck des Kapitalisten zu behandeln. Auch nicht der einzelne Gewinn, sondern nur die rastlose Bewegung des Gewinns. *Dieser absolute Bereicherungstrieb, diese leidenschaftliche Jagd auf den Wert* ist dem Kapitalisten mit dem Schatzbildner gemein, aber während der Schatzbildner nur der verrückte Kapitalist, ist der Kapitalist der rationelle Schatzbildner. Die rastlose Vermehrung des Werts, die der Schatzbildner anstrebt... erreicht der klügere Kapitalist, indem er es stets von neuem der Zirkulation preisgibt." Ibid, 140-141. Emphases added.

The emphases serve to point out that Marx, unlike so many of his, our, contemporary epigones, fully recognized that *not only are subjectivity and objectivity inextricably bound together in the description of capitalism as a system of social relations, but also that the logic of capital starts from subjective desire*. We have had occasion to state this far more forcibly elsewhere.

⁷⁴.... austauschen, also auf einem Umweg Geld gegen Geld, dasselbe gegen dasselbe, scheint eine ebenso zwecklose als abgeschmackte Operation." Ibid, 138.

⁷⁵„Schließlich wird der Zirkulation mehr Geld entzogen, als anfangs hineingeworfen ward." Ibid.

⁷⁶„Und diese Bewegung verwandelt ihn in Kapital." Ibid.

⁷⁷„Das Ende jedes einzelnen Kreislaufs, worin sich der Kauf für den Verkauf vollzieht, bildet daher von selbst den Anfang eines neuen Kreislaufs." Ibid, 139.

⁷⁸„Die Zirkulation des Geldes als Kapital ist dagegen Selbstzweck, denn die Verwertung des Werts existiert nur innerhalb dieser stets erneuerten Bewegung." Ibid.

⁷⁹„Die Bewegung des Kapitals ist daher maßlos." Ibid (footnote deleted).

In the deleted footnote Marx references Aristotle. The German has Marx's Aristotle saying, „denn das zum guten Leben genügende Maß dieser Art von Besitz ist nicht unbegrenzt," that "then for the good life an adequate measure of this kind of property is not unbounded." (The English language edition, Fowkes' translation, reads "that true wealth consists in use-values, articles necessary to existence, for the property required for a good life is not unlimited," *nicht unbegrenzt, Capital, I, 253, n. 5*); whereas, for a form of acquisition Aristotle calls "chrematistics," there appears to be no limit, „keine Grenze," to riches and property.

It is indeed odd that Marx used „maßlos" derived from the nominative, „Maß," meaning "measure" (and also "moderation") which, though not the sense here, fits nicely with Aristotle's sensibilities). This is not pedanticism, for "constantly renewed movement," „stets erneuerten Bewegung," is not with any necessity "without boundaries" or "unlimited," „kein Grenze." What makes it unbounded is the conjoining of the subjective compulsion to accumulate, that "unquenchable drive for enrichment, this passionate hunt after value," to the logic of capital, „die Bewegung, worin er Mehrwert zusetzt, ist seine eigne Bewegung, seine Verwertung also Selbstverwertung" (Ibid, 141), in other words, to -valorizing value.

⁸⁰„Er geht beständig aus der einen Form in die andre über, ohne sich in dieser Bewegung zu verlieren, und verwandelt sich so in *ein automatisches Subjekt*... In der Tat aber wird der Wert hier das Subjekt eines Prozesses, worin er unter dem beständigen Wechsel der Formen von Geld und Ware seine Größe selbst verändert, sich als Mehrwert von sich selbst als ursprünglichem Wert abstoßt, sich selbst verwertet. Denn die Bewegung, worin er Mehrwert zusetzt, ist seine eigne Bewegung, seine Verwertung also Selbstverwertung." Ibid.

⁸¹„Sein subjektiver Zweck," and „treibende Motiv." Typical of Anglo and American Marxists, Fowkes translates the latter *objectivistically* as "driving force." Ibid, 140.

forms an automatic subject: *Once established, the movement of capital is autonomized, i.e., its development requires no external causation, it exists on its own foundations and it cannot exist apart from its own development as its own necessary premise, and it becomes automatized, i.e., tendentially absent a contravening opposition (which can only take shape as conscious agency) generated by its own development, it is self-regulating, self-correcting and reproduces itself as a matter of course.* It is the account of this movement (the movement of capital), an elaboration of its logic (the logic of capital), which discloses the intelligible structure of society, that of a subjective-less subject (i.e., lacking will and consciousness), *capital*.⁸²

This, however, gets too far ahead of ourselves. We are required to return to our account where we left off. The question, then, is, "What is the source of this increment (ΔM), surplus-value, which is the object of this endless movement?

In either case, whether it is the circulation of commodities mediated by money (C-M-C) or the circulation of money mediated by commodities (M-C-M), movement does not step outside the sphere of circulation. All exchanges are acts of buying and selling. All that transpires is a metamorphosis, a change in form of the commodity, whether it is a use-value or, so it *seems*, money. How does this allow the valorization of the values, hence the creation of surplus-value, that enter circulation? As long as we confine ourselves to movement within circulation, it doesn't. In the case of the circulation of commodities, the same homogenized, quantified, objectified and materialized labor remains with the commodity possessor through the two changes of form (C-M, M-C). Examined formally, the exchange of commodities is nothing more than an exchange of equivalents. It is not a means of increasing value. The formation of surplus-value does not take place with circulation. Moreover, purchase of commodities above, or below, their value merely means sale of the same commodities will be below, or above, their value. Nothing is gained. Additional value has not been created, the transformation of money into capital cannot be explained from circulation.⁸³

The same conclusion is to be drawn the circulation of money in its antediluvian forms, merchant's and usurer's capital. If, as we have shown, an increment does appear in the circulation of money in either forms of capital (M-C-M' and M-M'), the transformation of money into capital cannot be explained from circulation alone. (Later we'll discover both antediluvian forms are, at any rate, derivative, *abgeleitete Formen*).⁸⁴

Since surplus-value cannot spring from circulation, for it to form something else must occur in the background which is not visible in it, circulation, itself.⁸⁵

So we are left with this. Capital does not and cannot arise from circulation (chapter 4.2), yet it does not and cannot arise apart from circulation (chapter 4.1). "It must at once originate in it and not in it."⁸⁶

So what have we established?

The metamorphosis of money into capital (M-C) cannot generate added value, since money itself functions as a means of buying and thus merely realizes the price of the commodity purchased and paid for; and where it does not change form M-M[, value remains unchanged, its quantity constant. Similarly, the transformation of the commodity back into money [C-M] is simply that, a reversion without a change in the magnitude of value.

Marx concludes, the addition of value can only spring or originate from the commodity use-value as such, that is, from its consumption.⁸⁷ If this is the case, then within the sphere of circulation there must be a commodity the use-value of which itself is the source of value. And, lo and behold, there is such a commodity, albeit very peculiar in that its actual consumption objectifies labor, thereby producing value. It is the capacity for labor or labor-power.⁸⁸ Or, as Marx laconically remarks later on, "The process of the consumption of labor-power is at the same time the production process of commodities and of surplus-value."⁸⁹

At this point, Marx offers a definition of labor-power, again using the term interchangeably with capacity for labor. The determination is brief, and we shall forgo its discussion until our next section in which in detail we critically take up

⁸²See *The Critique of Science*, the Interlude, "Real Domination in Production and Autonomization of Capital."

⁸³Marx, *Das Kapital*, I, 5: 142-146.

⁸⁴"Man mag sich also drehen und wenden, wie man will, das Fazit bleibt dasselbe. Werden Äquivalente ausgetauscht, so entsteht kein Mehrwert, und werden Nicht-Äquivalente ausgetauscht, so entsteht auch kein Mehrwert. Die Zirkulation oder der Warenaustausch schafft keinen Wert." *Ibid*, 149. ("However one twists and turns, the conclusion remains unchanged. If equivalents are exchanged, no surplus-value results, and if non-equivalents are exchanged, still no surplus-value results. Circulation, or the exchange of commodities, generates no value.")

⁸⁵*Ibid*, 150-151.

⁸⁶"...der Mehrwert nicht aus der Zirkulation entspringen kann, bei seiner Bildung also etwas hinter ihrem Rücken vorgehn muß, das in ihr selbst unsichtbar ist." *Ibid*, 151.

⁸⁷"Es muß zugleich in ihr und nicht in ihr entspringen." *Ibid*.

⁸⁸"Die Veränderung kann also nur entspringen aus ihrem Gebrauchswert als solchem, d.h. aus ihrem Verbrauch." *Ibid*, I, 4.3: 152.

⁸⁹"Um aus dem Verbrauch einer Ware Wert herauszuziehen, müßte unser Geldbesitzer so glücklich sein, innerhalb der Zirkulationssphäre, auf dem Markt, eine Ware zu entdecken, deren Gebrauchswert selbst die eigentümliche Beschaffenheit besäße, Quelle von Wert zu sein, deren *wirklicher Verbrauch also selbst Vergegenständlichung von Arbeit wäre, daher Wertschöpfung*. Und der Geldbesitzer findet auf dem Markt eine solche spezifische Ware vor – das *Arbeitsvermögen oder die Arbeitskraft*." *Ibid*. Emphases added.

⁹⁰"Der Konsumtionsprozeß der Arbeitskraft ist zugleich der Produktionsprozeß von Ware und von Mehrwert." *Ibid*, 160.

Marx's account (chapter 5) of the labor and valorization processes.

As a commodity labor-power, of course, has a value. Like every other commodity, it is determined by the amount of labor-time socially necessary for its production and, since it is living labor and thus subject to entropic forces (dehydration without water, hunger without food, inclement weather without shelter, aging, etc.), its reproduction. Marx specifies not just these requirements but the ways in which they are met, those that are socially, historically and culturally specific relative to place, time and level of productive development, and to the circumstances in which free labor has formed, indicating there is always a "historical and moral" element in the determination of the value of labor-power, which at any given place and time is more, than less, known...⁹⁰ And, though Marx does not say so, the cultural and historical specificity of the manner in which living labor is subject to entropic forces is not simply given with this specificity, but will vary with what workers are able to extract and what capitalists are willing, of *compelled*, to concede; in other words, this "historical and moral" element in the valuation of labor-power is, unlike any other commodity, to a real extent determined by *class struggle*.

We can summarize the balance of the discussion (chapter 4.3) in which Marx has already laid out the social and historical conditions for the constitution of this unique moment in human history in its entirety, that at which the commodity form has become universal and free waged labor first appears in socially generalized form.⁹¹

For the metamorphosis of money into capital, the owner of money, at once in possession (proprietorship) of means of production, raw material and implements, must be able to find free labor available on the commodity market, in the sphere of circulation. This worker must be "free" in a twofold sense; first, she must be able to dispose of her capacity for labor as her own commodity; and, second, she must have no other commodity for sale, i.e., she is compelled to sell her capacity for labor to socially reproduce herself,⁹² to sustain herself and her family.

Historically, this set of circumstances was first found in western Europe. And, while it has since, *on the basis of this initial development (i.e., following upon penetration by capital originating here)* been found elsewhere and today globally, in western Europe there were specific conditions that formed the necessary premises on which these circumstances arose, and thus were necessary premises of the rise of capital as capital (self-valorizing value). We have mentioned and discussed all three others. They were, *first*, the separation of the toilers, peasants, from ownership of means and medium of production, above all proprietorship of land and "instruments" through which agriculture was pursued, plough(s), work animals (cattle, oxen) and animals that provided sustenance (chickens, pigs, etc), barns, sheds and so on. This historical condition created another, proletarianization, i.e., recreated, as we have already indicated, a peasant allot, tenant, serf, etc as a "free" waged laborer (the *second* condition, already alluded to above). *Third*, only in western Europe can we one of two decisive theoretical mediations of capitalist activity, the creation of the modern science of nature mediating to the bourgeoisie as bearer of capital a vision of man, nature and community. (Having already begin this discussion, we shall return to it later)... If Marx discussed the peasant expropriation and formation of a class of "free" waged laborers in great detail, beginning with chapter 4.3 in *Capital* (and also in early draft of this great work, that is, in the *Grundrisse*), here we shall focus at length on the *second* necessary premise which is missing in Marx's ideal reproduction of the intelligibility of concrete totality we call capitalism.

We can begin by asking ourselves, why did the birth of modern capitalism accrue to this region, western Europe, alone? What made it different? Why did the transcontinental network of trade more or less encompassing western Europe, and the commercial powers within it, never get beyond an early proto-mercantile phase? Why didn't Swedish merchants, the network of exchanges in Byzantium dominated by the Venetians, or the Arab world form the basis of a mercantile or commercial capitalism? Alternately, having seen the dissolution of central feudal social relations, the rise of towns and economically vibrant merchant strata, why didn't Japan go down the road of mercantile capitalism as the Tokugawa assumed the shogunate? Setting aside the inadequate and misleading terms "commercial" and "mercantile," why did the formal domination of capital over labor in production fail to assert itself anywhere in this transcontinental network of exchange? What was different, qualitatively so, in western Europe?

Schematically, we can say with each, Norsemen, Venetians, Byzantines, in the Islamic caliphates, and among the Japanese, either activity was oriented to commerce, or settlement or both, exclusively without merchant efforts to establish control over labor in production, or that commerce was governed, legally restricted, by the imperatives of the state. How did this differ from the situation in western Europe?

The response has two parts.

To begin, the basic existential requirements of the portmen, burghers or bourgeoisie and their activity as such was the *unimpeded pursuit of commerce*, called it "freedom" of a sort. We can cite Pirenne's formulation for its clarity and incisiveness: What was "most indispensable was personal liberty. Without liberty, that is to say, without the power to come and go, to do business, to sell goods, a power not enjoyed by serfdom, trade would be impossible. Thus, they claimed it, simply for the advantages which it conferred, and nothing was further from the mind of the bourgeoisie

⁹⁰*Ibid.*, 156.

⁹¹Less universalization of the commodity-form, this recapitulates now in Marx's idiom our similar, historical discussion in "The Formal Domination of Capital over Labor as an Epoch in the History of Capitalism," above.

⁹²*Das Kapital*, I, 4.3: 152-154.

than any idea of freedom as a natural right; in their eyes it was merely a useful one."⁹³ There were consequences of this fundamental conviction, and, in front of them, ramifications already immanent to the situation as it existed on the ground. First, a "useful right" already in fact belonged to some of those who had taken up residence in the towns. These included those born of unfree parents, perhaps serfs perhaps not, but whom could not be traced back to a lord; then there were the emphatically serfs. In either case, they could not be coerced back to a manor.

The power of the manor did not extend to the city. This *de facto* situation, thus, had *de jure* implications: The peasants who now were employed in the city had to be guaranteed their freedom; failure to do so would disrupt the circuits of formal capital's movement. In the towns, this meant (ex-)peasants could not be compelled to marry only within their station and class; and, in the countryside, it was additional impetus to forgo labor services and to abolish the chevage in order to render the towns (or worse, organized revolt) less attractive, to prevent the rate of desertion of the estate from ballooning.⁹⁴

But in a practical way, this liberty went far beyond the personal status of individual merchants, to the legal status of merchants and artisans (actual or possible) as social groups. Liberty was, in fact, increasingly an institutional characteristic of a municipality, just as serfdom was, *seemingly*, a feature of the soil. In fact, the proper contrast was between the personal dependency that characterized rural life under feudal conditions, and the liberty of place, personage and activity that characterized the towns engaged in commerce and a distinctive division of labor that stemmed from large-scale trade. It was this activity, trade, that most required institutional, legal sanction, and it was the early merchants themselves who first established amongst themselves that institutional framework in which they acted. This was the *contract*. It covered aspects of a form of life predicated on exchange that ranged from the most mundane to the decisively important and hit on the unusual as well. Thus, pacts were drawn up, clauses of which dealt with reduction of tolls and access over roads and waterways to rights in cases of dispute settlement and compensation over unjust seizure, and claims of ownership of merchandise in gray areas such as a shipwreck off the territory of the party that was not transporting the goods.

Now the situation in the towns, municipal liberty, rested on fragmented political authority across the region, the historical predominance of the autarkic estate in which the administration of justice was carried out, either in the absence of or in opposition to kingly power, a historical situation (of fragmentary political authority) from which urbanization evolved. This unique merchant freedom, and underlying it the absence of a great overlord sitting atop a centralized state, was one condition for the formation of early capitalism in western Europe (though not elsewhere, and thus not fundamentally), what we refer to as the (growing ascendancy) of the formal domination of capital over labor in production, because production (cloth, above all), like exchange, was a controlled by the merchant (and not by the state).

Already indicated, the other, the second, crucially and *fundamentally* significant development differentiating commerce and production in western Europe from the rest of the commercial world (circa 1200) constituted an objectified and institutionalized elaboration, a dimension of Objective Spirit that crystallized, recreated as a principle of social organization and objectively codified the lived and experienced, personal freedom of the merchant. This was the concept of liberty, of municipal liberty resting on and securing the political framework for practices realizing (the) personal liberty (of merchants), i.e., their property and its security in opposition to Church and state authority, was decisive for the formation of an automatic subject, i.e., capital. The elaboration of municipal legality as activity-sanctioning juristic concept was a central aspect of the development of categories of formal law and their objectified codification, especially as they relate to private property in production. We can throw this development into bold relief in three contrasts, one with the situation of the preceding era in which, pervasive, feudal social relations in the core zone predominated (a situation these categories were intended to mediate, whose outcomes they were designed to decisively transform), and a second, more briefly, with the absence of such a (legal) development in a distinctively different form of landlordism (which would eventually give rise to a distinctively different social formation, tributary Tsarism) at the center of a quite different society and culture, and a final contrast with English customary law.

First, the preceding era at least as it obtained in a core feudal zone, old Francia between the Loire and Rhine. The basic feature of this situation was the primacy of locality in all claims on objective substance, whether property or

⁹³Henri Pirenne, *Social and Economic History of Medieval Europe*. New York, 1937 (1933): 50.

⁹⁴Thus, as the Florentine *popolo grosso* took the fight to the rural magnates, the Commune intervened to weaken seigniorial rights, against serf like conditions, refusing to return peasants who abandoned rural estates, accepting them into the Commune (not as citizens, but as laborers in woolen manufacture), asserting communal sovereignty (over the immediate rural hinterland, the *contado*) and municipal liberty. Practically realized, this assertion effectively abolished seigniorial prerogatives and existing tenorial obligations; in the process commuting labor services, "enfranchising" some peasants (and there were cases of mass, i.e., whole village, "enfranchisements"), legally sanctioning free movement, sale and inheritance; and most radically, appropriating and assimilating lay (and ecclesiastical) lands.

The endpoint of the struggles against the great rural lords was, in Florence, the Ordinances of Justice, and in Barcelona, the Catalan Ustages. These fundamental laws are historically significant because they were concrete historical instances of the municipal legality and universal law, law that incarnated the imperatives of merchant striving for absolute, unconditional protection for private property in production, itself a historically indispensable condition for the rise of capitalism.

inheritance in the larger sense, or in claims of right (*droit, Recht*). Each group resident to a specific estate tended to develop its own tradition of right. This was what should have been expected since little was codified or formalized in writing, each locality and the group that created its contours varied according to the specificity of its history, geography, even climate and topography. In this situation where custom and tradition ruled, it should again come as no surprise, that the fundamental principle operative in any such claims, the second feature of this situation, was, "What has been is simply and as such what is right."⁹⁵ Peculiarly, and perhaps not so peculiarly at all, as Bloch notes this made right, neither fixed in writing or statutory law, extraordinarily flexible.⁹⁶ Judicial decisions were by and large made orally, and recourse to them was based on oral recollection, so that, as Bloch fails to note, with no check on it memory was shaped by current interest.

We should already be able to intuit the enormous problems this informality would give rise to in cases where the transfer of goods based on trust, i.e., on the extension of credit and its terms, was concerned. And, in this regard as Bloch again points out, it was exceedingly uncommon for anyone under these conditions, i.e., with a view to real property in the era of the predominance of feudal social relations, to refer to ownership, whether it was an estate or official position that was at issue.⁹⁷ Instead, what was invariably invoked was *seisin*. This is decisive, and it is worth quoting Bloch at length: "*Seisin* was "possession made venerable by the lapse of time. Two litigants go to law about a field or a right to administer justice. No matter which of them is the present holder, that one will succeed who is able to prove that he ploughed the land or administered justice in previous years or, better still, that his ancestors before him did so."⁹⁸ The entire situation comprehended by *seisin* was reinforced, enormously strengthened, by the multiplicity of obligations, and thus of legitimate claims, that burdened the land.⁹⁹ If the tenant and his family who worked the land and harvested its crop, and if, to boot, his father did the same, if a retainer collecting a portion of the surplus as rent, the basis of his livelihood, if his lord who had granted him the right to exploit this expanse of land, if his lord who had granted him a fief of the land in the first place, if the successive families of the lord of lords which would each in time regrant the *fief*, if the village community recouped use of the land after the harvest (e.g., gathering corn stubble for work animals), if all these could make a claim on the same piece of land, what sense did exclusive title, ownership in the Roman (or bourgeois) sense, make? The answer was none.

Second, we can contrast the situation of Mediterranean merchants with that of Kievan princes at roughly the same historical moment: For these princes, the *Pravda Russkaia* (Russian Law) was a codification "connected in largest part with the protection of the private property [in production] of the princes, and with the people who managed and labored on their estates."¹⁰⁰ It was nothing more, there were no claims to universality, just the defense of the property of a powerful man simply because he was powerful, i.e., owned and possessed vast tracts of land, villages and their populations, and slaves... But increasingly important for the bourgeoisie as it formed historically, movable property (e.g., merchant's inventory) lacked the permanence of the land as well as its natural fecundity: It was not immediately considered as property. With the rise of Barcelona and the communes on the Italian Peninsula the situation became acute; but the universality of Roman law with its practice of logical subsumption permitted a codification that bestowed the same legal status on the movable property of, say, ascending Florentine merchants as the landed property of the rural magnates they defeated. This, we might add, had the distinct advantage of entailing in law recognition of *sui generis* sociality and personality of the merchant, thus, no longer a mere auxiliary social figure embedded in, albeit at the edges of vast Mediterranean social formation.

In a third contrast we shall taken as given the absence of specificity and concreteness of Roman concepts (their lack of mutual mediation of the particular and universal, and the recovery of which by Italian jurists of Roman law at the University of Bologna formed the basis of the formalization, first, of municipal liberty and later of bourgeois legality generally). In a formal way this absence is only possible as common law, as a continuous accretion to the law establishing precedent ever anew. In England, landed lords utilized and deployed once Roman, increasingly bourgeois legal concepts in their absoluteness and unconditionality against the copyhold, whose land was, unless (he, the copyholder, was fortunate and) listed in the manorial rolls, merely his without title (which belonged to the lord) by virtue of immemorial social practice. For a concept of property that is absolute and unconditional, it is irrelevant how many generations of peasants have farmed this plot of land, the title is in the lord's name and he, thus, can dispose of it in any manner he sees fit, which, of course, includes raising fixed rents and removing the peasant (having a sheriff do so) when he falls behind on his payments. Practices of this sort, the use of the courts and the

⁹⁵"What has been *ipso facto* has the right to be." Marc Bloch, *Feudal Society*, I, 113.

⁹⁶*Ibid.*

⁹⁷*Ibid.*, 115.

⁹⁸*Ibid.*

He continues, "in so far as the case is not remitted to the ordeal or trial by battle, he will invoke as a rule, 'the memory of men, as far as it extends.' Title-deeds were hardly ever produced save to assist memory, and if they proved that a transfer had taken place it was merely a transfer of *seisin*. Once the proof of long usage had been adduced, no one considered it worthwhile to prove anything else."

⁹⁹*Ibid.*, 116.

¹⁰⁰Jerome Blum, *Lord and Peasant in Russia: from the Ninth to the Nineteenth Century*. Princeton, 1961: 27, 28 n.8, 46 (citation).

sheriffs marked an accelerating dispossession of the English (and Scottish) peasantry, and the corresponding accumulation of land in the hands of a capitalist tenant farmer and equally capitalist gentlemen gentry for nearly two centuries, down to the appearance of the London sectaries in the 1640s.

So what was crucial, above all, on the Italian Peninsula was the recovery, if you will, of Roman law and its development, especially the categories of Quiritarian ownership, and the recovery, elaboration and objectified institutionalization of the concept of property as unconditional and absolute, which raised claims of legal title over possession of property and made them unassailable and inviolable.

Without this abstract legality the movement of capital could never have transcended its own specific origins (specific locale) and formality (i.e., formal domination of capital over labor), it would never have been freed from customary law in the greatest part of the world, especially where it has undergone its most "advanced" development. Embedded in institutionally religious sanctions against usury or requirements concerning lordly treatment of the poor, or guild regulations as they appeared in the western Mediterranean, or in similar restrictions and limitations as they existed in the commercial emporia (e.g., Constantinople, Smyrna, Damascus) of the Ottoman Empire or those (e.g., Osaka, Kyoto) in Tokugawa Japan, capitalist development would have remained merely formal, an urban accessory geared to the luxury consumption of the households of princes who hegemonized rural, aristocratic social formations.

Concept of Surplus-Value
Summation
(Volume I, Chapters 1-4, 5.2)

We now understand that, uniquely, as a commodity labor-power can produce use-values and surplus-value.

Just as the commodity is the contradictory unity of use-values and value, this unique ability of labor-power gives rise, following Marx, to a distinction between the production process of use-values and the valorization process; stated differently, the process of production is the contradictory unity of the labor process and the value-generating process.¹⁰¹ The former process is concerned with the quality, condition and content of the labor, the latter solely with its quantity.¹⁰² With respect to the production of surplus-value, it is the latter that concerns us.

Since the value of each commodity is determined by the amount of labor socially necessary to produce it, thus, by socially necessary labor-time objectified and materialized in it; since the capitalist owes means of production (in Marx's example, spindle, spinning wheel), raw material inputs (yarn), and a determinate interval of labor-power (a working day), as well as the product (cotton, the commodity produced) as a result of bringing that labor-power to bear on productive means and inputs; and, since the capitalist aims only at the production of a surplus of value over and above the aggregate total of the value embodied in each of these "factors" of production,¹⁰³ *the valorization process effectively dominates the labor process.*

Above, we have seen that it is in circulation where surplus-value is realized. This has been denoted by the formula, $M-C-M'$, and as the formula suggests, it is realized in the form of money, as additional money or profit. At the same time, we have also seen that it is uniquely labor-power which can create both a use-value and value, and a surplus of value as well. This all transpires in production, or as we negatively stated above, surplus-value does not and cannot arise from circulation, yet it does not and cannot appear apart from circulation.

Summarily, if capital is to form, its formation takes place in production and its realization in circulation, that is to say, it occurs in and through their unity, the capitalist process of production as a whole; the unity of production and circulation constitute capitalist production as a whole.

So let us consider the production of surplus-value. The crucial feature here is the working day. We shall let Marx speak, for he tersely captures what occurs here: "... the past labor embodied in labor-power and the living labor it can perform, and the daily cost of maintaining labor-power and its daily expenditure in work, are two wholly different quantities."¹⁰⁴ What is meant and intended is that, as proprietor of productive means and inputs and similarly as owner of labor-power for the period of the working day (and for each day in which the worker is committed to working, by vital necessity and contractually in the informal sense), the capitalist determines what constitutes a working day *without respect to that segment of the same working day which is required to social reproduce labor-power*, i.e., the worker as living, sentient being and, depending on that "moral and historical element," his family (if he has one) as well. In other words, the temporal interval (so many hours, say, six) required to social reproduce labor-power does not coincide with the temporal interval (so many more, say, six giving a total of twelve) which actually forms the length of the working day: The value of labor-power and the value which it valorizes, then, are quite different magnitudes.¹⁰⁵ Expressed in value terms (and realized in monetary terms as profit), the difference between these two quantities, in the example the difference between six and twelve hours, is the surplus which the capitalist appropriates.

Let's broaden our horizons just a little.

Our capitalist is not "out there" alone. Daily, he confronts other capitalists who own productive means and inputs, and purchase labor-power. They deploy that labor-power to produce use-values *as* commodities. Our capitalist confronts these other capitalists, some of whose commodities are qualitatively similar. *They compete* in the market place in order to realize the values these commodities embody, they exchange these commodities (C-M) with buyers in the sphere of circulation seeking, phenomenally speaking, profit (ΔM).

In competing they seek technical advantage (e.g., a more productively efficient machine), lower input costs and cheaper labor-power in order to secure sales, i.e., in order to realize the value(s) embodied in their commodities. Technical advantage can be costly, acquiring it is not a daily affair, and once acquired, though a temporary cost of production advantage may be achieved, competitors are compelled to make a similar acquisition or be subject to declining sales, eventually to ruination. Input costs tend toward a socially generalized average. Here again, a temporary advantage can be achieved, but it is only short-term. That leaves labor-power.

¹⁰¹ *Das Kapital*, I, 5.2: 169.

¹⁰² *Ibid.*, 172.

¹⁰³ To boot, we not only understand he can only secure this surplus-value through sale of the commodity, we shall also come to understand that very sale brings him into contact with other capitalists bringing to market the same or similar products and this, the competition, forces him to compel the laborer to produce more commodities with less socially necessary labor-time embodied in each.

¹⁰⁴ "... die vergangne Arbeit, die in der Arbeitskraft steckt, und die lebendige Arbeit, die sie leisten kann, ihre täglichen Erhaltungskosten und ihre tägliche Verausgabung, sind zwei ganz verschiedene Größen." *Ibid.*, 175-176.

¹⁰⁵ *Ibid.*

Capitalists exert great effort to drive down labor costs. If successful, this reduction insures profitability because those costs have been driven below what is socially necessary to produce a given commodity. Since the distinguishing feature of commodities as commodities is their "value," i.e., homogenized, temporally quantified, and materialized labor, the reduction of labor costs is constituted in and through the temporal relation of social reproduction of labor-power to the total length of the working day. There is a non-equivalence here. The amount of time required to reproduce labor-power does not coincide with that which actually consumed in the daily production of commodities. Thus, there is accordingly also a non-equivalence with respect to the monetary "compensation" of those whose produce. This non-equivalence is, as we remarked above, achieved in difference between the hours of the working day in which labor-power is expended and those hours required to socially reproduce labor-power. There is no increase in productivity unless workers are uncompensated for this temporal disparity. This uncompensated relation, which is an essential, necessary feature and structural condition of capital accumulation and hardly an arbitrary act, we, following Marx, call exploitation. The excess of value (surplus-value) created through increased productivity is realized as such, and appears phenomenally, when the commodity is sold. Profit, actually excess (surplus) value, can now be returned to the capitalist...

But even here the capitalist, capital, runs up against an unsurpassable barrier immanent to production, that is, to the production of surplus-value. In a passage which, as Roman Rodolsky points out,¹⁰⁶ does not appear in *Capital* (I): It is *living labor* which sustains the entire valorization process; without it there is no surplus-value extraction. That immanent barrier consists in the limit that the logic of capital borne along by its movement runs up against as, following on technical innovation, exploitation tends to encompass the entire working day. Take, for instance, a working day of twelve hours, half, six hours, of which is required to socially reproduce the worker, the other half of which is surplus labor which, materialized in a commodity as surplus-value and realized in the sale of the commodity, returns to the capitalist as profit. If a novel technique input permits that capitalist to reduce the labor-time required to socially reproduce the worker by one-half (3 hours), the surplus labor-time devoted to commodity production also increases by one-half (3 hours). And if still another innovation permits production to once again be radically transformed reducing the labor-time once more by half (1.5 hours), the surplus labor-time will also increase by one-half (1.5 hours). As the reduction in necessary labor-time increases, so does the increase in surplus labor-time, but the rate of surplus-value increase declines and its declines precipitously. One can start from any length of the working day, any ratio of necessary labor-time to surplus-labor and this relation will hold: As the exploitation of waged labor approaches the entire working day, the rate of increase of surplus-value extraction approaches zero. And, while a certain part of the working day must always retain a portion devoted to social reproduction of labor-power, i.e., must consist in socially necessary labor-time, or so Marx insists,¹⁰⁷ the capitalist can drive down the costs of labor below what is socially necessary to reproduce labor-power. It may or may not happen frequently, but it is virtually a given that whenever a capitalist's profit margins come under increasingly pressure, and ruination appears on the horizon, the attempt will invariably be made. (Success is more or less inversely proportional to the solidarity, confidence and combativity of those workers counterposed to the capitalist.)

Finally, Marx notes that, "The larger the surplus-value of capital prior to increase in productive force, the... smaller is the increase in surplus-value which capital gets from the increase of productive force."¹⁰⁸ The upshot should also be clear: "...the more developed capital already is, the more surplus labor it has created, the more terribly must it develop labor's productivity in order to valorize itself in only small proportion, i.e., to add surplus-value."¹⁰⁹ Thus, it manifestly follows, that, "The self-valorization of capital becomes more difficult to the extent that it has already been valorized."¹¹⁰

This relations established here appear, to us at least, to foreshadow the far more formulaic, later statement of an increasing organic composition of capital in its relation to a falling rate of profit.

¹⁰⁶ *The Making of Marx's Capital*, Vol. 1. London, 1977 (1968): 216.

The passage Rodolsky cites is from the *Grundrisse*: „Die lebendige Arbeit setzt ein *Arbeitsquantum* zu; aber nicht durch dieses *quantitative* Zusetzen erhält sie das schon vergegenständlichte Arbeitsquantum, sondern durch ihre *Qualität* als *lebendige Arbeit* oder dadurch, daß sie sich also Arbeit zu den Gebrauchswerten verhält, worin die vergangne Arbeit existirt“ („Living labor adds a *new quantum of labor*; however, it is not this *quantitative addition* which preserves the amount of already objectified labor but rather its *quality* as *living labor*, that it relates as labor to the use-values in which the past labor exists.“). *MEGA* II/1 *Ökonomische Manuskripte, 1857/1858* (*Grundrisse*): Teil 1, 274-275.

¹⁰⁷ Which what he means when he states, „Der [mehr] Wert kann nie gleich dem ganzen Arbeitstag sein; d. h. ein bestimmter Teil des Arbeitstags muß stets gegen die in dem Arbeiter vergegenständlichte Arbeit ausgetauscht werden. Der Mehrwert ist überhaupt nur Verhältniß der lebendigen Arbeit zu der im Arbeiter vergegenständlichten; das *eine Glied des Verhältnisses* muß daher immer *bleiben*.“ *Ibid*, 252. Emphasis in original.

¹⁰⁸ „Je grösser der Surpluswert des Capitals vor der Vermehrung der Productivkraft... desto geringer ist das Wachstum des Surpluswerts, das das Capital von der Vermehrung der Productivkraft erhält.“ *Ibid*, 254. "Productive force" should be read as "the productive force of labor" or "productivity of labor."

¹⁰⁹ „Je entwickelter also schon das Capital, je mehr Surplusarbeit es geschaffen hat, um so furchtbarer muß es die Productivkraft entwickeln, um sich nur in geringem Verhältniß zu verwerthen, d. h. Mehrwert zuzufügen...“ *Ibid*.

¹¹⁰ „Die Selbstverwertung des Capitals wird schwieriger im Masse wie es schon verwertet ist.“ *Ibid*, 255.

Ontology of Labor, Metaphysics of Physicalism
Labor-power and Living Labor
(Volume I, Chapter 5.1)

What is labor-power?

Marx offers a concise determination. Since much depends on the meaning of this passage, and thus here on its translation, we shall parenthetically cite the text of German as well. It will require some etymological analysis to establish precisely what we mean and intend.

"By labor-power or capacity for labor, we understand the aggregate of physical and mental capacities existing in the living body, the living personality, of a human being which he sets in motion whenever he produces a use-value of any kind." („Unter Arbeitskraft oder Arbeitsvermögen verstehen wir den Inbegriff der physischen und geistigen Fähigkeiten, die in der Leiblichkeit, der lebendigen Persönlichkeit eines Menschen existieren und die er in Bewegung setzt, sooft er Gebrauchswerte irgendeiner Art produziert.")¹¹¹

Note specific terms, respectively, (Marx's) German and (our) English: *physischen, Leiblichkeit, lebendigen Persönlichkeit, in Bewegung setzt*; physical, living body, living personality, set in motion.

What centrality is at issue here is the *source* of those capacities (*Fähigkeiten*), both "physical" and "mental." This source is the living person in her bodily being, or, as we prefer, as incarnate subjectivity.

By the middle of the long nineteenth century, the language of German intellectuals, of the entire German *Mittelstand*, had been thoroughly penetrated and reshaped by scientific concepts, more mediately by the movement of capital. It would have made no difference if *Das Kapital* had originally been published in English or French, for, later, in the short twentieth century, it took a special effort to linguistically articulate the distinction which Marx aims at here, but which he cannot break through to. (He cannot because he confuses *Wissenschaft* in the Hegelian sense with the physicalism emanating from modern science of nature, Newtonian science.) Through little or no fault of his own, the very language he uses is confusing, and, though striving to, he is unable to transcend this confusion. In Husserl's later works,¹¹² we find a clear distinction between the body as lived and experienced (*Leib*) incarnating the human person at once mediating and the medium of all experience, and the body as an object of modern scientific study (*Körper*). The model for the latter is the Cartesian *res extensa*, contentless, quantitative extension, matter, the model of which when "applied" to "man," first appearing in the Cartesian grounded medicine of (Henricus) Regius and (William) Harvey, was the *cadaver* explicated with reference solely to "mechanical qualities [actually, quantities] of their invisible [or insensible] components."¹¹³ Marx, thus, is exhibiting a clear awareness of the inadequacies of the language in which he wrote when he explicitly deployed the terms, *Leiblichkeit* and *lebendigen Persönlichkeit*. By, just as clearly, he demonstrates his commitment to modern science, its physicalism, when he refers to *der physischen... Fähigkeiten*. The intrinsic ambiguity is heightened with the term "motion." Motion is the causal language of modern science in its metaphysically loaded account of natural being, its characteristic "description" of the relation, a passive relation of mutual exteriority, between bodies stripped of all qualitative and sensuous features, whether that motion is determined by attraction at a distance (Newtonian gravity) or the curvature of space-time (Einstein). By contrast, in Hegel, *Bewegung* is "movement" as the *activity* of a conscious being existing in *historical* time. The ambiguity is lost in the English because there is no other way to express what is intended than in physicalist terms: The phrase *in Bewegung setzt* must be translated as "setting in motion."¹¹⁴

But the ambiguity infuses all Marx's pronouncements on this determination. Thus, we have the following:

"Labor-power exists only as a capacity of the living individual... Labor-power, however, only realizes itself in its expression, only as it is engaged in labor. In and through activity, as labor, a determinant quantity of human muscle, nerve, brain, etc is expended, and these must be replaced." („Die Arbeitskraft existiert nur als Anlage des lebendigen

¹¹¹Marx, *Das Kapital*, I, 4.3: 152-153.

¹¹²E.g., Edmund Husserl, *Die Krisis der europäischen Wissenschaft und transzendente Phänomenologie*. Den Haag, 1954 (1936) and *Erfahrung und Urteil, Untersuchungen zur Genealogie der Logik*. Prague, 1939.

The distinction finds extensive, qualitative development in Maurice Merleau-Ponty with his concept of a "body-subject." See his *Phénoménologie de la Perception*. Paris, 1944. See, above all, Part II.

Being Christian (i.e., Roman Catholic), the inherited tradition fared no better: Lacking the distinction, it generated another, every bit as mystifying and abysmally separate, that between body (the old English *body* corresponding to the old High German, *botah*, meaning corpse) and the soul. *The New Shorter Oxford English Dictionary of Historical Principles*. Oxford, 1993: 1252. Several definitions are offered, but etymologically they all reduce to distinction between the "physical" and the "spiritual."

¹¹³Theo Verbeek, *Descartes and the Dutch: Early Reactions to Cartesianism Philosophy, 1637-1650* (Carbondale, 1992), 13-14, citing from Regius' *Disp. Medica da illustibus aliquot quaeestionibus physiologicis* [la—IIla]. Utrecht, 1641.

¹¹⁴We have preserved both the ambiguity and the confusion, but our preferred translation, one which captures the genuine sense of a capacity for labor, is, "By capacity for labor we understand the totality of the affective, cognitive, kinesthetic and sensuous capacities of incarnate subjectivity exercised whenever she produces a use-value of any kind." This, however, is not Marx.

In this, our preferred translation, we omitted "labor-power" (*Arbeitskraft*) since power in Marx's era had the distinctive ring of mechanical thrust, specifically the steam engine. We used "capacity for labor" (*Arbeitsvermögen*) solely, because it preserves the sense of the potentiality and capacity of a living being.

Individuums... Die Arbeitskraft verwirklicht sich jedoch nur durch ihre Äußerung, betätigt sich nur in der Arbeit. Durch ihre Betätigung, die Arbeit, wird aber ein bestimmtes Quantum von menschlichem Muskel, Nerv, Hirn usw. verausgabt, das wieder ersetzt werden muß.")¹¹⁵

Patent in the different of formulations in the first two sentences, to one side, and the third and last to the other, the contrast between living, *incarnate* subjectivity and the "physical" being of modern science is striking. But it not just somatic exhaustion that one experiences in (abstract) labor as activity, but the dulling of sensibilities, the hardening of affection, the constriction of the capacity for reflection, and slipping away of aspirations. But, then, these specifically human features cannot be captured by an analysis framed physicalistically...¹¹⁶

What follows is criticism. It has three inseparably distinct parts.

The first criticism centers, contrary to Marx, on the historical specificity of the category of labor-power. The second criticism demonstrates that Marx's *ontologized* understanding of labor and labor-power nakedly contradict the historical framework of his analyses. The third exhibits the disjuncture between labor-power and human creativity.

So, first, with respect to historicity of labor-power itself, and, consequently, its role and place in society and history, we can start with Marx himself. Go back to the passage we have just concluded reviewing and explicating:

"By labor-power or capacity for labor, we understand the aggregate of physical and mental capacities existing in the living body, the living personality, of a human being which he sets in motion whenever he produces a use-value of any kind." Here Marx present the capacity for labor as a general character of human existence.¹¹⁷ (As we shall see below, he does so in the same way he presents labor as an "eternal" and "natural" mediation of man to nature). However, in the passage which cited immediately below, the *historical specificity* of a type of society to which this labor-power exclusively belongs is fully disclosed as the premises on which its reality and being rests.

"In and for itself, the exchange of commodities of itself implies no other relations of dependence than those which result from its own nature. On this presupposition, labor-power can *appear upon the market as a commodity*, provided its owner, the person whose *labor-power* it is, *offers it for sale, or sells it, as a commodity*. In order that he as its possessor may sell it as a commodity, he must have it at his disposal, must be the free proprietor of his capacity for labor, i.e., of his person. He and the owner of money *meet in the market*, and enter into relation with one another as enter into relation of equal standing as commodity owners, with this difference alone, that one is buyer, the other seller; both, therefore, *equal in the eyes of the law*" (emphases added).¹¹⁸

Again, note the terms and passages we have emphasized.

While markets appear in many, not all, forms of precapitalist communities, in some of those where they do appear products of labor are bartered. Products appearing as commodities, then, characterize exchanges in a small set of human societies, specifically those statist forms which have reached the level of civilization. Manifestly, markets and especially markets where some products are exchanged as commodities do not characterize all forms of human sociation, i.e., they are historically specific.

¹¹⁵Marx, *Ibid*, I, 4.3: 155-156.

Taking for granted the same affirmation of the modern science of nature as Marx contradictorily does, the Fowkes' English language edition exhibits a ubiquitous linguistic commitment to physicalizing the translation. Thus, with respect to the passage in question we have the following: "Labor-power exists only as a capacity of the living individual... However, labor-power becomes actuality only by being *applied*, it is *activated* only through labor. In the course of this *activation*, which is labor, a certain quantity of human muscle, nerve, brain, etc. is expended, and these things must be replaced." *Capital*, I, 6: 274-275 (emphases added). Note those emphases: Human activity in the form of labor has the sense of the mechanical action of an externally applied force not qualitatively different from the application of steam to a piston.

¹¹⁶In contradistinction to Marx, in an unpublished manuscript, *The Foundations of Human Formation* (Madison, 1975), Part II, First Division (Preliminary Investigation into the Presuppositions of the non-Objective Subject of the Disciplines of Developmental Psychology and Theoretical Biology), "Phenomenology of Labor," we developed the categories of the analysis of work as activity, labor wherein the body as live and simultaneously as instrument mediates our relation to nature, to the materials and means of labor. This relation constituted, e.g., a carpenter or machinist, in work and an instrument or machine, e.g., a hammer or lathe, is a living relation. That is, the instrument is not, for the worker, different from, e.g., one's arm; it is incorporated into the body, into one's body understood as *Leib-Körper*.

¹¹⁷This is a view which over time Marx held consistently. Thus, we find the following, where the same position, albeit stated obliquely, is clearly meant and intended: "So wenig also menschliche Arbeitskraft von Natur Kapital, so wenig sind es die Produktionsmittel. Sie erhalten diesen spezifischen gesellschaftlichen Charakter nur unter bestimmten, geschichtlich entwickelten Bedingungen..." ("As little as human labor-power is capital by nature as it is means of production. It obtains this specific historical character only under determinate, historically developed conditions...") *MEGA III/13. Das Kapital. Kritik der politischen Ökonomie. Zweiter Band: Der Zirkulationsprozeß des Kapitals*, 1.2: 39.

¹¹⁸"Der Warenaustausch schließt an und für sich keine andren Abhängigkeitsverhältnisse ein als die aus seiner eignen Natur entspringenden. Unter dieser Voraussetzung kann die Arbeitskraft als Ware nur auf dem Markt erscheinen, sofern und weil sie von ihrem eignen Besitzer, der Person, deren Arbeitskraft sie ist, als Ware feilgeboten oder verkauft wird. Damit ihr Besitzer sie als Ware verkaufe, muß er über sie verfügen können, also freier Eigentümer seines Arbeitsvermögens, seiner Person sein. Er und der Geldbesitzer begegnen sich auf dem Markt und treten in Verhältnis zueinander als ebenbürtige Warenbesitzer, nur dadurch unterschieden, daß der eine Käufer, der andre Verkäufer, beide also juristisch gleiche Personen sind." *Das Kapital*, I, 4.3: 153.

Law too is a statist invention, i.e., characterizes social divided and stratified societies in which are tiny minority stands over and against the vast overwhelming majority, organizes its self-defense with bodies of armed men, retainers, tribute and tax collectors who enforce the appropriation of material surpluses, who, beyond armed force, maintain hegemony through promulgation of a legal code. No state, no law.¹¹⁹ Above all, a market in which labor-power is sold as a commodity is unique in the history of capitalism, designating one form of sociation exclusively, capitalist modernity, in which commodity transactions have become the universal form of exchange.

Not all forms of society, very few in fact before 1200 ce, have markets in which "use-value" (itself another category specific to the historical totality, capitalism) sell as commodities. A society where all products assume the form of commodities is a society which is unique in history, one in which the *commodity form is universal*, the form on the basis of which relations between social individuals are constituted and carried out. Appearing first in England, circa 1765 ce, there is only one society in history characterized by the universal form of the commodity, namely, capitalism. Tersely, Marx's own presentation is contradictory: On the evidence he himself provides, labor-power is a historically specific phenomenon.

Second criticism. Metaphysical (i.e., ontologically *ungrounded*) assumptions underpin Marx's understanding of labor-power, which fly in the face of the historical framework of his analyses.¹²⁰

The labor-process, "independently of any specific social form,"¹²¹ is ontologically central. It is "the universal condition of the metabolism between man and nature, the unending natural condition of human existence ... common to all forms of human sociation."¹²² This is not merely an "abstraction" for the "development of material production ... [is] thus the basis of all social life, and therefore of all real history."¹²³ Marx insists here that "all social life" can and must be understood from the standpoint of the labor-processes. Maybe so, but then, again, perhaps not.

In point of fact, Marx's perspective will not stand up to anthropological scrutiny. Labor is not a decisive feature of man as man, it does characterize human reality as such. Consider the case where the social life is not amenable to analysis in terms of the labor-processes.

Archaic communities first developed in history as a countermovement to the appearance of the state. Absent a separate sphere of production, an economy and a state, they naturally yet humanly overcame natural determinism (at least in the specific forms of institutional hierarchy and fixed positions in a division of labor). Archaic communities counterposed themselves to statist tributary formations and, of course, capitalist modernity. As late as the latter half of the short twentieth century, archaic communities could be found in which social individuals engaged in work (the "labor" of gathering and hunting) for a little on average as two hours daily. The source of this remark was Marshall Sahlins, who in a 1968 essay stated 15 hours per week of work characterized "original affluence," i.e., archaic communities. The specific reference was to the Dobe among !Kung Bushmen of the Kalahari.¹²⁴

One can read the texts in question for oneself and, for that matter, the literature of supporters that it has spawned.¹²⁵ Here we shall merely summarize what is crucial for the relations of archaism to "civilization," i.e., to stratified societies based on fixed positions in a division of labor, thus to statist societies in their tributary (modern as well as ancient) and capitalist forms, and among various forms of kingship and landlordism based on private property in production as well.

In Lee's account, the analysis is twofold both moments of which are quantitative; (a) there is an attempt to calculate

¹¹⁹Governed by popular *Geist* (i.e., the totality of these mores and customs, the individuals who were their bearers and the social life in which they are embedded), archaic communities are non-statist, are absent canalization of popular Spirit into legal institutions, do not have a separate sphere of production and do not labor. See Pierre Clastres, *Société contre l'état* (Paris, 1974), and our *Archaic Communities and the Origins of Agriculture*.

¹²⁰A careful, self-reflexive historical analysis will lead, we think invariably, the author back to a consideration of underlying premises. Marx's ontology of labor is critiqued here, not because he has engaged in formulating fundamental assumptions, but because they are evidentially unfounded.

Marx understands human labor as the self-mediation of nature. In fact, man is in nature, of nature, nature but humanly natural. Human activity self-mediates nature. Does labor? No:

We have undertaken to ground historical analysis of human sociation, though, to be sure, we have done so critically and anthropologically-evolutionarily. One of the conclusions we reached is that labor and work cannot be privileged as fundamental dimensions of human existence. See *The Materialist Dialectic*.

¹²¹ "...unabhängig von jeder bestimmten gesellschaftlichen Form." *Das Kapital*, I, 5.1: 161.

¹²² "...allgemeine Bedingung des Stoffwechsels zwischen Mensch und Natur, ewige Naturbedingung des menschlichen Lebens... vielmehr allen seinen Gesellschaftsformen gleich gemeinsam." *Ibid*, 167.

¹²³ "...die Entwicklung der materiellen Produktion, also die Grundlage alles gesellschaftlichen Lebens und daher aller wirklichen Geschichte." *Ibid*, 164, note (first appearing in the second edition).

¹²⁴"Notes on the Original Affluent Society" (1968) reproduced in *Stone Age Economics*. New York, 1972: 79-98. Sahlins, in turn, based himself on the analysis of Richard B. Lee, an abbreviated version which was presented in a very well-known work of Lee and De Vore. ("What Hunters Do for a Living, or, How to Make Out on Scarce Resources", in Richard B. Lee and Iren De Vore (eds.), *Man the Hunter*. Chicago, 1969: 30-48.) Lee presented his full analysis in a collection that appeared the following year (1969).

¹²⁵The best are critical and include Elizabeth Cashdan, "Hunters and Gatherers: Economic Behavior in Bands" in Stuart Plattner, *Economic Anthropology*. Stanford (CA), 1989: 21-47; and Bob Black, "Primitive Affluence: A Postscript to Sahlins." N.p., 1992.

the hours given over to hunting and gathering among the !Kung,¹²⁶ and (b), there is a further effort to describe the nutritional value in caloric terms of the food consumed.¹²⁷

The quantitative determinations made by Lee were in the Kalahari Desert in southern Africa, *one of the most inhospitable environments on Earth, and not the tropical zones of lush abundance where "labor" is vastly less*. The analysis was based on four (4) weeks in July, a period during which the amount of work required is greater since the trees of mango nuts (the basis staple of the !Kung diet) closest to encampments had been picked clean and the time consumed in reaching those less desirable foods now further from the encampments increased markedly. (Since Marx held the "labor process" in its "simple form" consists of labor as activity, the object of the activity on which the activity is performed and the instrument deployed in laboring, plucking fruit from a tree, *gathering seeds from plants and picking berries, would not constitute labor in the first place* since gathering among archaic peoples was absent the instrument.)¹²⁸

Here we might also note, actually it is important to stress, that Lee's analysis and the measure of his quantitative determination was made in a desert setting (i.e., in a region of the world characterized by a dearth of resources), yet the time devoted to work still remained qualitatively less than labor under statist, especially capitalist, conditions.¹²⁹

Archaism appeared first in human history with massive resources in nature (at least relative to human population densities) without any dynamic of technical development; capitalism today appears in human history with those resources in nature disappearing yet on the basis of a massive, institutionally separate technological development.

Summarily, there have been forms of sociation in human history in which those who constitute these forms do not labor. Analytically labor-power (and labor as well) are categories that are not germane to this communities. While Marx expressly assumes an ontology of labor, the categories of labor and labor-power are historically specific, the latter relevant to capitalism (production for production's sake) alone. The contradiction is not dialectical; the premises are merely untenable, unsustainable and, to boot, a retreat from the critical insight into the intelligible structure of the historical totality, capitalism, Marx had already achieved. We'll now consider those premises.

Third criticism. Fully consistent with this ontologization is the identification of labor-power with human creativity. Tacking back and forth between the historically specific categorial capture of the relation between capital and workers' activity, its commodification as labor-power, and an ontology of labor, Marx intends this capacity for labor is, in its *capitalistically canalized form* of labor-power, a form of making that is productive, that *brings forth something new in nature and into the world*.¹³⁰ Though its precise meaning is difficult to ascertain (Marx never accounts for the concept, thus never justifies its use), he calls this *objectification*. Under conditions of capitalist production, this novelty is *value*.¹³¹

¹²⁶With respect to the !Kung, other accounts suggest marginally more or somewhat less hours, but in Lee's analysis as he fully developed it at a later date encompasses "subsistence" proper, that is, the actual time spent in hunting and gathering by men and women, as well as all reproductive activity (e.g. food preparation and cooking). Comparatively speaking, it is vastly less than that of a working class family under conditions of capitalist production. Richard B. Lee, *The !Kung San: Men, Women, and Work in a Foraging Society*. Cambridge (MA), 1979: 278.

¹²⁷Nutritionally, hunter-gatherer diet is more than sufficient in basic values (in particular, protein and carbohydrate derived from nut and vegetative plant life) and caloric intake. !Kung appeared fundamentally healthy; they live lives in length comparable to those average lifespans of capitalism in its heyday (in the 1960s), children, weaned late (until 3-4 years of age), know nothing of the debilitating experience of poor health due to e.g., asthma, obesity, spectacularly mediated inactivity that leads to serious physiological disorders later in life, etc., which afflict the young of large social layers under capitalism. The hunter-gatherer situation should be contrasted with the two nutritional extremes at which individuals, in particular proletarians, have lived and bodily experienced in the same history of capitalism: Various degrees of malnutrition at one extreme and morbid obesity at the other, the latter based on market formed dietary regimes with the nutritional value of styrofoam characterizing merely the last 40 years of capitalism.

¹²⁸*Das Kapital, I*, 5.1: 163, where he explicitly states, „Der Gegenstand, dessen sich der Arbeiter unmittelbar bemächtigt - abgesehen von der Ergriffung fertiger Lebensmittel, der Früchte z.B., wobei seine eignen Leibesorgane allein als Arbeitsmittel dienen - ist nicht der Arbeitsgegenstand, sondern das Arbeitsmittel.“ („The object which one immediately takes hold of - apart from seizing ready-made subsistence, such as fruits, in the course of which his own bodily organs serve as the instrument of labor - is not the object of labor but its instrument.") Here we would refer the reader to Laural Bossen, "Women and Economic Institutions" in Plattner, *Economic Anthropology*, 321-322. Among the Bushmen, gathering was primary and gender cooperative in hunting was a given. The Kalahari is an exceedingly hostile environment in which to carry out social-human reproduction; comparatively, the Amazonian, central African and Indonesian forests, and the North American plains are, or at least not more than a half century ago, were large reservoirs of foods, gatherers' paradises.

¹²⁹A similar contrast holds for historically late Papago farmers. Their practices have transpired in intervals, periods of full days, determined by and following on 4-6 annual rainfalls. Here the concept of labor, much less "full-time" work had no meaning.

¹³⁰He, "man," not only effects a change in the form of the materials of nature; at the same time, he realizes his own purpose in those natural materials." („Nicht daß er nur eine Formveränderung des Natürlichen bewirkt; er verwirklicht im Natürlichen zugleich seinen Zweck...") Marx, *Ibid.*, I, 5.1: 162.

¹³¹Though its significance can be contextually apprehended, the concept simply appears without explanation, Marx, as it were, simply plumps it down. Thus, we have "self-acting labor-power... is nothing other than self-objectifying labor" („...ethätigenden Arbeitskraft... nichts ist als sich vergegenständlichende Arbeit." *MEGA II/13. Das Kapital. Kritik der politischen Ökonomie. Zweiter Band: Der Zirkulationsprozeß des Kapitals*, 11: 205), demonstrating not only a simply assumed yet unclarified meaning but the faux equation of labor-power and human creativity.

But the worker's labor-power it is not human creativity itself. (If there is any concept in Marx which is congruent with that of human creativity, it is, as we have previously hinted, *living labor*.) Instead, the constitution of labor-power... it is formed, it is not given, say, as the central dimension of a humanity essentially defined by labor... rests on the abstraction of the latter, as we argued above, on a form of violence and repression specific to the labor processes of capitalism: Here we well might invoke Lyn Marcus: As he understands it, *labor-power is never "simple productivity," that which produces a mere product* (while real wealth as the content of capitalist accumulation is the "movements in productivity," self-expanding self-expansion)¹³²... The product is, after all, only the medium in which labor-power expansively reproduces itself as "a new increase in the quality of labor-power" itself¹³³... for capital, it has no other justification.

But work as concrete purposive labor, as human creativity, is not "labor-power." Labor-power is labor as a commodity, the worker's "capacity for labor" (*Arbeitsvermögen*). That is to say, as "labor-power" human creativity has already been subject to abstraction. The transformation of concrete purposive labor into "labor-power" (through the sale of labor for a wage) is the latter's abstraction, and entails, as we said above, a *form of violence and repression specific to the labor processes of capitalism*. Labor is quantified in terms of time (days, hours, minutes) worked, is rendered indifferent to a worker's specific skills, sensibilities and concerns, it is homogenized, objectified and materialized; it is embodied in an object, a sensuous material form and thus enters the commodity produced in work as its "substance": In the labor processes of capitalism, concrete purposive labor is rendered abstract, i.e., it is unspecific (homogenized), temporally quantified, materialized and objectified as "value." But this is labor as labor-power, it is human creativity subject to the imperatives of capital and only as abstracted and canalized into the production of commodities.

Recall that it is not labor that is characteristically my labor, concrete labor... my forethought, my skill, dexterity and ingenuity, and my effort and exertion as it goes into making an object... that renders a commodity equivalent to another.

It is only propertyless, waged labor as it is subject to capitalist exploitation... this is abstraction as a "real material process," it occurs in production... only labor that is homogenized, quantified, objectified and materialized as emptied temporality (as socially necessary labor measured in units of objective time or, if you prefer, clock time)... what we call abstract labor.

So that beginning from concrete purposive labor, its purchase, through its abstraction in the labor processes of capitalism and the production of commodities to the formation of capital, this movement completes the "circuit" in which labor-power expands itself.

So that, further, as labor-power is formed on the basis of the *entire series of abstractions* that are ceaselessly accomplished always anew in capitalist labor processes, it is continuously augmented capital which is the end of the whole process: In abstracting from concrete purposive labor and treating humanity creativity as labor-power (which, we might say, is treating it in terms of a metaphysics of capital), really and effectively one treats of humanity only insofar and inasmuch as it is transmogrified into capital...

Starting from the ubiquitous givenness of the commodity we have traversed the contradictory movement of value, its, the commodity's dual nature incarnating both use- and exchange-value; the exchange of commodities and, in and through that exchange, the constitution of a universal commodity, money, which in its universality *seeming* absorbs, going beyond, the contradictory nature of the commodity, its dual nature; the contradictory roles of money as medium of exchange and measure of value, opening up onto its role as means of payment; the circulation of money and the contradiction between its role as a means (of exchange) and its independence (granting its holder social power) exhibited both in the extension of credit facilitating and accelerating exchange *and* its magically fetishistic productivity (M-C-M'); lead to a demystifying discussion of labor-power as a unique commodity whose productive consumption is simultaneously the creation of additional value appropriated in and through circulation. The ideal reproduction of this entire movement, an immense movement which we have just begun to fathom, has brought us to that moment at which *capital* first appears. As this movement unfolds, and in thought as we follow it capturing its complexity, here its partiality and untruth, there its contradictory motion, we begin an ascent to the concrete.

A Note on Capital, and Labor-Power and Living Labor

Because each and every capitalist seeks to drive down production costs and, to do so, brings new machinery to production, the amount of socially necessary labor time embodied in each commodity changes: Over time, it declines

In Hegel, the movement of Spirit (a movement which is identical with historical time) is Spirit objectifying itself, externalizing itself, a going outside of itself in order to return to itself, the movement (*Bewegung*) in and through which it, Spirit, becomes aware of itself. In the materialist reading of Hegel, it is the manner in which man as Spirit forms herself. "The movement from inside to outside and outside to inside, this double movement begets synthesis, *activity*. It is a process and continuous practice of self-formation (what Marx for one calls *objectification*)..." See *The Materialist Dialectic*, Part V, "The Constitution of Spirit within Nature" and the conclusion, "The Appearance of Spirit."

¹³² *Dialectical Economics*, 167.

¹³³ *Ibid.*, 178.

(as the mass of commodities produced increases). Because this decline also confronts each and every capitalist as an objective necessity beyond each every capitalist's control yet the outcome of those very efforts,¹³⁴ we call this objective necessity *the logic of capital* ... Each capitalist is compelled to produce more to compensate for declining prices... *This compelling necessity, this logic, creates capitalism as a system, as an interconnected, interlocking production-based network of behaviors, practices, processes and institutions that incessantly undergoes change and development (expansion and quantitative enlargement). It is this change and development of capital (it is cyclical) that we call its movement.*

This movement culminates in *crisis and devalorization*. Yet it is devalorization, effectively destruction of significant portions of achieved levels of objective substance, which permits the production process and, on this basis, the entire system of social relations (capitalism) to renew itself.

Synonymous with expanded reproduction, what reemerges is precisely the activity of competing capitalists out of which originates the compelling objective necessity that subordinates each and every individual capitalist, in other words, what reemerges is the logic of capital.

It is, thus, clear that *capitalists* as class do not control the direction of capitalist development; instead, having long ago lost their class creativity, *have become in all significant historical events and actions mere bearers of capital's logic*... capitalists, owners or employers who pursue the production of commodities, and the firms in which and through which this pursuit is conducted, behave in identical ways regardless of their personal thoughts, feelings and pronouncements: *In all struggles against workers and in all socially significant events, capitalists behave as if they merely personified the abstract economic categories that describe the logic and movement of capital. They behave in this manner because they have fully internalized and assimilated this logic and it governs all their actions. It is for this reason that we speak of capitalists and firms as mere reflexes of its movement, as personifications of its logic, as capital.*

This situation with living labor is different, but it is masked by the immediate reality of the system of social relations as it weighs down on all social individuals whose interconnections and relations form in the most minimal sense society.

The categories of common sense and the knowledge that rise from daily activity spontaneously represent the capital-labor relation as a natural exchange, perhaps not fully equitable, between commodities owners, one who owns property in production and the other, living labor, who owns only her labor-power. This representation has it that this social relation is freely entered into, in this sense cooperative (well, maybe one party has too much authority), and mutually beneficial as the product is apportioned fairly, each party receiving returns (living labor, the wage) proportional to their varied contributions. What is not exhibited by this social relation, by the diverse interactions between capital and living labor as labor-power, and by the entire course of capitalist development is the *living labor's creativity, its productivity which underpins the entire system of social relations through creation of the surplus-value that supports its objective materializations in their entirety* (goods in the form of commodities, institutions, culture, and its imaginary, the image its polity gives back to different social groups). *The wage* is the portion allotted to living labor; simultaneously it is *a veil occluding the actual structure of this fundamental social relation*. It is part and parcel of that *primordially ideological constitution of society, its inverted character that extends to all reality*. Consider living labor in its necessary aspect, as the useful labor that produces goods to sustain social reproduction, to sustain the life and activity of society beyond production itself. Take concrete labor under conditions of capitalist production (real domination). Recall our earlier discussion:¹³⁵ Concrete labor does not appear as itself, as creative force, but as labor for capital (abstract labor) and, appearing as such, concrete labor appears as a mere specification of the labor which is the product of the entire series of abstractions that constitute the capitalist production process, a labor (abstract labor) that appears as its own reality, as real and *essential*, its source and origins as derivative and *phenomenal*. It is this inversion the wage hides, the false equality of capital and living labor it obfuscates, the exploitation on which capitalism rests.

¹³⁴We shall describe this situation more fully below, see "Accumulation, Simple and Expanded Reproduction."

¹³⁵"Commodity Fetishism and Anonymously Functioning Subjectivity," above.

Immediate Forms of Capital, Constant and Variable Capital
Summary Analysis
(Volume 1, Chapter 6)

In the immediate sense the following is a detour; however, it significantly bears on our later account and analysis. In any number of passages in the foregoing, we have tacitly, and in a least one or two instances expressly, distinguished between the labor process and the valorization process, between, as it were, the "subjective" and "objective" moments of laboring as activity.

If we consider the contents of one, the labor process, in terms of the other, the valorization process, we are asking ourselves to distinguish between the manner in which those contents, moments or various "components" of the one contribute to the other, to the formation of value.

Consider means of production, an instrument, instrument-complex or machine. It incarnates a quantity of value which, phenomenally speaking, is given with its price at the moment of purchase. That productive means, say a packaging machine, has a certain lifetime, an industry average, whereafter it is no longer useful. The magnitude of socially necessary labor-time embodied in the machine, its value, steadily declines over time as it functions in production. (Here, we exclude repairs and regular maintenance, sudden breakdown and even technical depreciation.)¹³⁶ But the value incarnated in the machine does not simply disappear as its usefulness is consumed over time in that very use; instead, in proportion to the same increments that it consumed in wear and tear, it is transferred to the value of the goods that, set in motion and kept in motion by labor, it is instrumental in producing.¹³⁷ As concrete, useful labor, the worker's labor transfers a portion of value of means of production, here the packaging machine, while simultaneously in the same labor process his labor (i.e., homogenized, temporally quantified labor) is also incarnated in the product, as a determinate quantity of the same otherwise indistinguishable labor-time (that is, the sameness with respect to the value transferred from the machine to the product by his concrete labor). Obviously, then, means of production lose determinate amounts of exchange-value as value is transferred by that concrete labor.¹³⁸ The capitalist deals with this loss by way of a booking device known as amortization.

While means of production retain (decreasing portions) of its independence as a use-value, other inputs to the process of producing goods such as raw materials, and any other auxiliary materials insofar as they are consumed in the production of the product in question,¹³⁹ fair differently. Precisely to the extent they are entirely consumed, they (patently) lose their independent form and their entire value is transferred to the new product. The distinction can be expressed differently in our original terms (labor and valorization processes): While one element is continuously enters entirely into the labor process and only partially consumed into the valorization process, another enters both and is fully consumed in both. Both are eventually entirely consumed in both processes. A third is partially consumed in both - the difference being that unlike means of production, or raw materials, labor-power (the third) must be renewed, socially reproduced in order to reenter the labor process (and hence function productively in the valorization process).¹⁴⁰ From the standpoint of capital, all elements are merely elements (here, costs) of production once that capital loses its monetary form in the purchase of each of these elements.

The portions of capital transformed into means of production, not just the instrument or machine but raw materials and auxiliary substances, which do not add anything, their values merely being transferred, to the product which emerges at the production process, Marx calls *constant capital*.¹⁴¹

¹³⁶A technical innovation, say the packaging machine in our example, will noticeably increase the units the machine can package in a given period, say an hour or a day. (From the capitalist's standpoint, the increase will preferably be a multiplicative, not an additive, a qualitative not a quantitative increase.) While embodying more socially necessary labor-time, it simultaneously requires less (preferably multiples less) labor-time to produce the same number of commodities. This effectively depreciates the value of all package machines.

¹³⁷Marx, *Das Kapital*, I, 6: 185.

¹³⁸*Ibid.*

¹³⁹Auxiliary materials are those completely consumed by instruments of labor (esp. machinery) as those instruments carry out their functions in production, e.g., the coal consumed by a steam-engine (Marx's example). See *Das Kapital*, II, 8:1: 146, and "Turnover of Capital. Effects on Profitability and Accumulation," below.

¹⁴⁰*Ibid.*

¹⁴¹It is important to bear in mind that in speaking of constant capital, Marx is speaking about its *value* composition so in discussing a falling rate of profit where that rate is defined as $s/c + v$; where "s" is surplus-value, "c" constant capital and "v" variable capital, so that it appears treatment of the tendency of the rate of profit to fall over historical time is not a direct empirical proposition, and marshaling evidence of this sort without a critical discussion of what is at issue is illicit.

Moreover it should also be noted that Michael Heinrich, *Introduction to the Three Volumes of Karl Marx's Capital*, New York, 2012 (2004), among other Marxists, treats constant capital solely as that portion of the value of means of production transferred to the commodities in their production. *Ibid.*, 100. For a detailed discussion of this various issues involved here, see David Harvey, *The Limits to Capital*. London, 2018 (1982): 176-189.

On the other hand, the portion of capital which is deployed in the purchase of labor-power, and which both reproduces its own value (its quantitative equivalence) and an excess of value, surplus-value, in the production of a product, Marx calls *variable capital*.¹⁴²

The distinction is, as we stated above, important. The relation between the two moments will permit us to apprehend a limit which in its ever expanding development the movement of capital tends to run up against in the forms of crises which shake it to its foundations

¹⁴² *Ibid*, 189.

*Production of Absolute and Relative Surplus-Value and
their Geographical-Historical Interstices (Survey of the World as Capital's Epochal Formal Domination Achieves
Maturity, 1490-1672/1687 ce)
The Modern Science of Nature*

*Summary Analysis
(Volume 1, Chapters 10, 14)*

It is of major import to note that both absolute and relative surplus-value are coordinated temporally (as well as spatially) at their origins. Keep this in mind.

These are relatively easy concepts to understand. Their ramifications, however, reach back in actual historical time long prior to the advent of capitalist production in the strict sense. There are two features we wish to discuss: The first concerns the lengthy prologue to capitalism, namely, capital's epochal formal domination over labor in production; and the second concerns the "input" to that production which renders capitalist development irreversible, namely, the modern science of nature.

We must, though, begin with the production of surplus-value in both its absolute and relative forms.

Based on the exploitation of labor-power, the viability of capital, its continual (quantitative) enlargement and (spatial) expansion, is not given; it is subject to numerous outcomes, of small, daily struggles and large class confrontations as two conflicting class teleologies face and oppose one another in production, and across the various institutions in society.

In production an increase in the rate of exploitation, the ratio of the labor-time consumed in reproducing labor-power to the labor-time expended beyond it during the course of the working day, is achieved in one of two general ways (or in a combination of both).

Absolute Surplus-Value and the Formal Circuits of the Movement of Capital

The first way is realized if the capitalist can successfully lengthen the working day. The labor-time required to socially reproduce labor, that portion of the working day workers devote to generating value adequate to sustaining themselves, remains unchanged, but the overall length of the working day is increased. This occurs only if the capitalist is a merchant, i.e., is not directly involved in production itself. Initially, in the historical sense, the merchant as capitalist has merely taken over an existing labor process (e.g., peasant or guild production), stipulating, to be sure, that labor, while "free," is no longer independent (in those cases where it had been). The merchant capitalist owes both the means of production and its other sensuous-material inputs, otherwise designed in a general way as raw materials and (in Marx's idiom) auxiliary substances. This manner of increase in the surplus obtained from labor (by lengthening the working day) Marx calls *absolute surplus-value* extraction. "The prolongation of the working day beyond the point at which the worker would have produced an exact equivalent for the value of labor-power, and the appropriation of that surplus labor by capital - this is the process which constitutes the production of absolute surplus-value... the production of absolute surplus-value turns exclusively on the length of the working day..."¹⁴³

The specific methods through which absolute surplus-value is extracted vary in different places and at different times. For instance, in the long history of the Florentine Republic (from at least 1250 until 1530 in the common era and beyond) the *Lana* manufacturers (i.e., great woolen and silk merchants) owed shops that employed propertyless wage-earners (*sottoposti*), beaters and corders, who worked the raw wool (or silk) which brought to them by agents of the great merchants on a weekly basis. The great merchants set pay rates and a schedule for completion. Periodically, the same agents would pick up the products of this labor (which would be turned over to more skilled artisans, some of whom owned their own shops), dyers, dressers, tinters and many more, for further processing and production. In the closing moments of the epoch of capital's formal domination (say, three to four score years before the Industrial Revolution so-called, earlier too), in the English countryside a merchant may have distributed raw cotton among each of several households in a village, each dwelling possessing a spinning jenny which he, the merchant, owed. He too would collect the product.¹⁴⁴

¹⁴³Die Verlängerung des Arbeitstags über den Punkt hinaus, wo der Arbeiter nur ein Aequivalent für den Werth seiner Arbeitskraft productirt hätte, und die Aneignung dieser Mehrarbeit durch das Kapital - das ist die Produktion des absoluten Mehrwerths." *Das Kapital*, I, 14: 458. And „Durch Verlängerung des Arbeitstags producirt den Mehrwerth nenne ich absoluten Mehrwerth..." ("The surplus-value produced by lengthening the working day I call absolute surplus-value") *Ibid*, I, 1, 10: 284.

¹⁴⁴We would also argue that *sharecropping* that developed in the aftermath of the American Civil War and across the era of legal segregation and racial apartheid in the southern United States exhibited the same essential relations. Though formally owner of the land, and contractually entitled to a portion (say, half) the cotton produced at harvest time, the sharecropper received advances for purchase of seed, fertilizer and tools, and further money to purchase food. At the end of the season, the merchant tallied up what the sharecropper owed him, and *invariably* the deductions reduced the sharecropper's portion to below the minimum required to socially reproduce himself and his family. He was perpetually in debt, a debt carried on the merchant's book from year to year. He was effectively a *disguised proletarian* receiving the equivalent of a wage below his labor's value in the market place, i.e., the labor-time required to reproduce himself, and his family, daily, weekly, monthly and annually.

In all cases, however, the merchant as capitalist makes no changes to the production process; he does not replace existing productive means with technically more advanced devices, and he does not reorganize the work process itself, say, for example, by bringing a group of workers together under one roof, by fragmenting and rationalizing work having one worker do this, another do that and still others do another aspect of what previously each and all workers had done, this, that and other aspects of what had once been a unitary operation.

While the merchant effects no transformation in the labor process, this does not mean that "technique" stagnated, that there was no development of inputs to labor: It, the labor process to speak abstractly, did not just continue as before (Marx), merchant capital did not merely attach itself to an existing labor process, to existing forms of productive activity or to various distinct "modes of productions": The merchant's presence created a situation, one he mediated, in which technical innovation in a narrow range of productive activities was accelerated (and in which he was directly involved in innovation in finance). These innovative activities were largely, if not exclusively (there were "spillovers," if you will, such as telescopes used in war and taken over in bourgeois theory, science), to be found in construction of walls, buildings and, in particular, fortifications and in the accoutrements of war, personal apparel (armor), hand weapons (swords, bows, shields, lances, muskets) and, above all, military armaments (cannon, weapons carriages). Technical innovation, moreover, appeared "spontaneously" or, more adequately speaking over the longer historical haul, sporadically at best, not systematically and certainly not ceaselessly (which only occurs as the modern science of nature and, inseparably, its technology become continuous inputs to production, a science and technology that had yet to come into being).

Innovation was, as we said, largely but not exclusively military. We shall provide one excellent, exemplary instance. In 1584-1585, the Army of Flanders under the Spanish governor general, Alexander Farnese, duke of Parma, undertook a siege of the city of Antwerp which was at that moment in Calvinist and Orangist hands. The investment was not typical, and though the *tercios* were installed in redoubts and small forts around the city and its dykes, and though there was fighting on the Scheldt and at the dykes (a relief force raised by Holland and Zeeland had, in cooperation with Antwerp, opened sluices and breached dykes in several places to flood the countryside in order to drive the Spanish off as they successfully did at Leyden in 1574), Parma¹⁴⁵ utilized no artillery during the entire course of the siege. Instead, two barriers made of water craft were set up on the river, the most important a series of barges were lashed together for some 2,400 feet across the Scheldt, with the aim of enforcing an embargo on the city and starving it into submission. What was significant in regard to technical innovation is that Spanish military engineers were able, against the Scheldt's strong currents, to hold the barges in place (permitting them to place soldiers and cannon on them, and bring up others behind them in other craft in order to defend this line against assault), by drilling with a specially invented machine and setting them on piles 75 feet down in the hard surface below the water bottom.¹⁴⁶ The machine had, we believe, no other purpose, and as far as we know it was never deployed elsewhere during this phase or any other one during the remainder (over 60 years) of the Eighty Years War. Further important instances of non-military innovation can be found in the English (and continental) invention of water-powered fulling mills in cloth manufacture (on the continental 3-4 fold productivity gains were made); and in southern Germany where flood free, deeper mine shafts were made possible by novel employment of water powered pumps and drainage adits, and where a smelting process separating silver from argentiferous-cupric ores was invented (the processes generated a five fold increase over seven decades in mined silver and copper).

Again, in another instance Margaret of Anjou (wife of Edward IV, one of the claimants to the English crown) in 1455 began to raise an army to defend Edward's claim, thereby threatening renewed disruption of commerce, and inaugurating the War of the Roses perhaps the last great internecine struggle within the English ruling class. War impinged on overland, transcontinental trade routes, for example between Italy and the Low Countries. These routes had already bypassed the areas of heavy fighting by the end of the Hundred Years War (circa 1435), beginning from the renewed Low Countries trade fairs (those in Brabant), south along the Rhine across the Brenner Pass into Lombardy. They were based on several transport linked innovations that included the appearance of dedicated commission houses, transport and cartage firms and a new larger, lower cost cart (Hesse wagons) traveling in convoys. These new routes, and along them the numerous small towns and large villages that grew with the commerce they carried, constituted the avenues along which formal capitalist penetration and rationalization took place, forming a new deeper infrastructure for that penetration, the veins and capillaries in and through which capital insinuated itself into the body social. Essential to the expansion of merchant-borne trade (no longer long-distance, merely intra-European trade), these innovations too, perhaps in some case involving merchant subscription in support of technical innovation originating elsewhere, were not initiated or undertaken by the merchant as capitalist.

¹⁴⁵Parma was at this moment commander of Spanish forces in the Netherlands. Parma did not order the use of artillery, bombarding the city, because at this same moment Antwerp, perhaps the wealthiest city in all Europe, was the center of formal capital's domination. To destroy it would have gone a long way to serious damage the formal circuits of capital's movement which, though he did not understand it in these, our terms, would have wreaked havoc with the finances and staunch wealth accruing to the Spanish crown.

¹⁴⁶The machine in question itself is poorly described in the literature, at least that with which we are familiar.

Where they occurred (and there were many during the lengthy epoch of capital's formal domination), technical innovations were not undertaken by, and did not begin with the intent and practice of, merchants as capitalists, as proprietors of means of production and purchasers of labor-power. The merchant siphoned off surpluses in exploiting labor and did so without either reorganizing those productive activities or generating new technical inputs to them. The producers were "simply" subordinated to exchange, the market and the merchant, but not to the production process itself.

Excursus and Elaboration

The Circuits of Capital's Formal Movement (Formal Domination of Capital over Labor) in the Run-up to the Advent of the Modern Science Nature

As capital's epochal formal domination initially reached maturity (circa 1490), ship's navigators and pilots bore merchants and traders, trappers, and small bodies of armed men led by "conquerors" (men like Cortez, Pizarro, later Raleigh, still later Cook) with priests (most ferociously, Jesuits) or missionaries to "new" lands. These lands, however, were not *territorium rez nullius* (i.e., vacant lands open to whomever desired to claim and, or, occupy them) whatever ideological obfuscations were otherwise proclaimed; rather, wherever "conquerors," armed men, priests and missionaries went they came upon large populations of settled peoples, some very densely domiciled.

What these adventurers and "holy men" ran up against were distinctively different, alien, most often "godless" peoples whose social lives were structured and organized by equally dissimilar, foreign and often incomprehensible forms of human sociation. What they were accustomed to were great landed lords often hierarchically organized with a king at their summit, rigidly stratified class and internally differentiated societies with cities, merchant and independent artisan classes and in vast rural stretches subservient peasantries (handfuls of which were alodists, independent), law recognizing private property in production (including merchant property), and culturally hegemonic and diffused monotheistic religion.

What they ran up against, and this much was familiar and comforting, were kingships lording over stratified societies, while the rest was unfamiliar and disconcerting, not just subordinate (sometimes enslaved) peasantries but large strata among them who worked land communally, artisans effectively subordinate to the kingly household, outside Japan few if any merchants and in all cases servile lacking municipal liberty, productive land all of which belong to the kingship (absence of private property), and outside the Levant and North Africa polytheistic religion which was culturally predominant. This is what they found that, though largely unfamiliar, sinful and blasphemous, it was at least intelligible.

But these adventures and "holy men" also found men and women beyond sinfulness and blasphemy, completely unintelligible, peoples without God, Law or King. Spread out over larger terrains, these were far less demographically dense (though still aggregately on each continent, especially the Americas, numbering in the millions) communities of gatherers, hunters and fishers. These were people without production and an economy, people who did not labor (and, offending the conquerors and missionaries no end, muscular, healthy and strong looking peoples), and, above all, people without a state.

For us, what these adventurers and "holy men" found were not, in both generalizable instances, producers who were "simply" subordinated to exchange, the market and the merchant (but not to the production process itself). What they found were two great historical forms of human sociation, tributary formations and archaic communities in which exchange and the market played very minor ones in social life. In confronting these distinctive forms of human sociation and the peoples who were their bearers, it was the conquerors, the bodies of armed men, the merchants and traders, trappers, priests and missionaries whose activities extended the reach and ensured the penetration of capital's formal domination.

Italian, Catalan and Flemish merchants had long inserted themselves in transcontinental networks of existing commerce and long-distance trade, that was Baltic-Russian (Kiev), and, far beyond this included trade routes uniting Kiev-Asia Minor, Asia Minor-China, Venetian-Byzantium territories in eastern Europe and Asia Minor, the Levant as a whole and Northern Africa, and Northern Africa-Arab Iberia. Early in the epoch of capital's formal domination, this had begun to the change, as Italian (Genoese, Florentine, Pisan) and Catalan (Barcelona) merchants, in their youthful heroic moment in history unifying trade and warring, took the Balearic, Corsica and Sardinia; as the early kingships took territories at the edges of emerging urban economic dynamos (Charles of Anjou took Sicily from the German prince, Manfred, the difference being in the wake of Charles' army came Marseillaise and Florentine merchants), Crusade armies took Acre and Haifa, leaving permanent merchant communities beyond there and in Antioch and Alexandria. Castilian and Aragonese kings pushed Arab dynasties out of Andalusia and Murcia, and Valencia, respectively, establishing in each merchants of Toledo, and Saragossa and Barcelona; and later as the armies of English kingship conquered Wales and established the Pale in Ireland, as Castile took and unified Asturias, Galicia and Leon under its control, as the French Capetians absorbed Vermandois, Champagne, Nivernais, Berry, Bourbonnais, Marche, Poitou and Maine, the merchants of London, Toledo and Paris followed in their wake.

As the epoch of capital's formal domination matured, Ferdinand having completed the "reconquest" of the Iberian Peninsula, his grandson Charles¹⁴⁷ began to receive the shipments first of gold (lasting a handful of years), then after 1545 massive amounts of silver mined from two sources one just outside the city of Potosi (in modern day Bolivia, in the foothills of the Andes, by 1611 the largest silver mine in the world) and the other (after 1560) in the "New" Spanish (i.e., Mexican) mines of Bajo (Guanajuato, Zacatecas, San Luis Potosi). The former was mined by waged Indian labor, the latter by enslaved and later waged Indian labor. Subject to constant pirating capture (above all, by the English), silver moved in the first case by wagon to Arica then by ship along the coastal Pacific to Lima, from there across the narrows of the Panama isthmus where it was hauled east by wagon overland to the Caribbean, then transported by Spanish galleons, perhaps stopping in Havana, across the Atlantic to Cadiz, then Seville. To the north in the Bajo, the silver was carried by wagon into the Valley of Mexico, into Mexico City, then east to Veracruz where it was loaded on galleons which sailed into the Caribbean stopping in Santo Domingo (Hispaniola) before crossing the Atlantic for Seville. So capital's formal domination now forcibly pulled far away peoples, first the Culhauque, Citlahuaca, Xochimilca, Chalca, Acolhuague and Mexica, then the Quechua and natives of the Mexican Central Highlands, into its circuits, while the movement of silver creating those circuits simultaneously formed nodal points in Arica, Lima, Veracruz, Havana, Santo Domingo (Cartagena, Araya, on the isles of Jamaica and the Leewards as well) where merchants communities were established and from which the formal movement of capital flowed into each and all of these communities' hinterlands. This was the "New" World.

Much further north, French traders and priests, Jesuits, began to penetrate along a large inland river that emptied into the North Atlantic, which these men renamed the St. Lawrence. Over a century later (1642), a large military outpost and trading center was established. Montreal. In the interval, more adventurers, hardy men, poured into the region. They traded with native peoples, in limited ways with the Cayuga, Mohawk, Oneida, Onondaga and Seneca in the Great Lakes regions and very extensively with the Huron (a Mohawk people). Perhaps in 1556 as Charles gave up his two crowns the Hurons were still hunters, fishers (for trout, sturgeon, pike) and trappers, engaged in some gathering, and contributed mediately to the social reproduction of their various communities around Georgian Bay. But by no later than 1630, the males among them were a decadent stratum, the females full-time agriculturalists who by themselves alone reproduced their communities. Deeply stratified along gender lines, the Hurons moved beyond archaism as far as possible without statifying. The men traded the corn planted, cared for, watched over (against rodents and birds, especially ravens and crows) and harvested by the women, traded (bartered) with the Nipissing, Ottawa, Tionnotaté and Neutral to their north and northwest for animal pelts, badger, fox, lynx, marten, moose, muskrat, otter and, in particular, beaver which they traded, again bartering, with the French for manufactured goods, especially iron products (doors of hewn boards with iron hinges, iron chains, harrows, hoops and nails, guns, knives, swords and mallets), which they, in turn, bartered all over again with the native peoples further north and northwest for more pelts. The Hurons were effectively merchants native to these lands mediating capital's formal domination, extending and enlarging the circuits through which it moved. This too was the "New" World.

Along the eastern Atlantic, Portuguese and English traders acquired slaves, African and pagan, from the counterparts controlled by petty kingships among the Asanta, Dahomey, Oyo and Ibo. These slaves were shipped, most died on the voyage in route, across the Atlantic to Barbados and Jamaica (and much later to the British colonies of Virginia and South Carolina) in exchange for sugar and rum. But the Portuguese ventured much further. Between 1487 and 1514, Portuguese pilots led ships' captains and their crews to western coastal India, Malacca (Melaca coastal city in present-day Malaysia), the Moluccas (the so-called Spice Islands, i.e., New Guinea), Macao and inland up the Canton River and, somewhat later, Japan. Dominating the spice trade on the continent, Portuguese merchants traded in Antwerp (from 1520 to 1585 the central emporium of commerce in all of Europe), where huge profits were made. To boot, the Portuguese had used muskets to conquer the coastal peoples of eastern South America, where sugar plantations were establishing deploying slave Indian labor. Sold in European markets, this too was highly profitable. Yet not all this ended up in hands of Portugal's Lisbon and Oporto merchants; rather, between the 1560s and 1640, much of this wealth was diverted to the Spanish king, for during this period Portugal had been reduced to a dependency.¹⁴⁸

From 1540 on, that trade, especially that originating from the western (Portuguese, then Spanish and later Dutch)

¹⁴⁷Charles I of Spain (1516-1556) simultaneously as Charles V, Holy Roman emperor (1519-1556).

¹⁴⁸In this account, western Europe in the epoch of capital's formation domination is contrasted to East Asian tributary empire (China) and society (Japan), as well as archaic communities. The contradiction of old order (Spanish) kingship simultaneously resting on pastoral activity (sheep flocks in the tens and hundreds of thousands) while embedded and increasingly intertwined with a form of production which was increasingly determined by capital's formal domination, and the great struggle of this kingship against the Calvinist and Puritan bourgeoisie as bearers of this form of productive activity, is ignored.

ports¹⁴⁹ grew even during the period of Ming dynastic Chinese embargo (even as trade in the form of smuggling with hidden bases in Chekian (Zhejiang), Fukien (Fujian) and Kwangtung (Guangdong) provinces took place). After 1560, Chinese kingship relented on its band on foreign trade and piracy began to lessen. Toward the end of the embargo period (roughly 1530-1560), the Portuguese with a base on Macao mediated Japanese and Chinese trade both, carrying cargo (largely silk textiles, raw silk and copper coin one way, silver and occasional slaves the other way) and acting as brokers. This monopolization would be hard to break, the Portuguese were well established, even before the diminution of piracy immune to attack. (Portuguese ships were armed with cannon, their crews with muskets, and this was something these crews mixing Japanese, Chinese and Korean pirates, the *Wakō*, had never seen.) They had a large presence in east and southeast Asia. In fact, both as a prelude to and laying the foundations for their ascendancy over a lengthy historical period in the East and South China Seas, an ascendancy rooted in establishment of thriving bases, the Portuguese had previously broken the Arab monopoly over Indian-European trade. Yet the period in which Portuguese merchants faced little competition from other European powers had ended before 1540.

In the high era of Spanish ascendancy over Europe (1525-1610), it was the Spanish who, mediated by a Chinese immigrant colony in Manila, conducted trade with China. Annually, a small fleet of Spanish ships, man-of-wars protecting a single large convoy vessel known as the Black ship. Loaded with silken cloth, porcelain serving containers, goblets, plates, vases and figurines; gems and ivory; cotton, iron; sugar, flour; oranges, jam; gunpowder; lacquerware, tables and chairs; even live poultry in exchange for Spanish silver mined in the Americas, the convoy traversed a route from East Asia back around the Cape of Good Hope and northward along coastal Africa to Seville. Consider this wealth in conjunction with the silver transported from the Americas. Silver arrived by in Cadiz twice annually, one group of ships from Lima and the other from Veracruz. From here, it was transferred to Dutch vessels, carried to Amsterdam and deposited by Dutch merchants in the Amsterdam bank. (The balance was transported onto Seville; well, not all of it): On average, a quarter of the entire Spanish shipment ended up in Dutch hands as offsets for prior purchases and loans, loans to finance the enormous costs of Castilian wars in the eastern Mediterranean (against the Ottomans), in the Low Countries against the Dutch themselves (actually, in the north against Holland, Zealand and Utrecht) after 1568 down to 1610, in the German provinces of central Europe and the central Hungarian plain (the Thirty Years War, 1619-1648).¹⁵⁰ There were, moreover, further, indirect remissions from other states whose merchants took a share of the silver arriving in Cadiz for loan repayments. These shares too were often deposit with the same bank. These merchants included nationals Spanish, southern Netherlanders, French and Englishmen.

Thus, the great empires of Europe (the Portuguese, Spanish, Dutch and English in that order) everywhere ran up against politically imposed limits of trade, against tributary kingships, in Eurasia the Tsar (dating from the reign of Ivan III, 1462-1505, effectively the first Tsar), in the Levant and north Africa (the Ottomans); in Japan after 1601, the Tokugawa shogunate; against powerful landlord regimes in the Balkans, among the eastern Mediterranean isles; against dynastic kingships, in China the Ming, all of whom were hostile to trade and merchant classes. (In the Americas as we well know, tributary kingships fell to the Spanish).

Everywhere else, in the South Hemisphere, in the vast tropical forests of Amazonia and the south western coastal grasslands, in the tropical forests and the lake regions of central Africa, in the Indonesian archipelago and Papua New Guinea, in the desert interior and the forests of Australia and in the western isles of Oceania; and in the Northern Hemisphere, in North America on the central plains and further north (above today's international border), north and south of the Valley of Mexico in middle America, in the Sonora desert, in the Caribbean, and much latter in the Canadian, Siberian and Scandinavian Arctics these adventurers, conquerors, traders and missionaries were met, incomprehensibly by archaic peoples, some of whom were traded with, but the vast overwhelming major of whom were conquered, enslaved, destroyed, murdered or killed by the viruses carried by Europeans.¹⁵¹

¹⁴⁹Beyond control of the *Bakufu*,* there was regional trade from Hakata family in the south isle, Kyūshū, with the Luchu (Ryūkyū) Islands, an important center of East Asian trade with ships from Ming China and Chōsen Korea frequenting the isles. (The Luchuans reached as far west as Siam, Burma, Sumatra and Java, trading Japanese swords, fans and sulphur for spices and perfumes whose production was indigenous to the tropics.)

¹⁵⁰No matter the enormous treasure the Spanish looted in the Americas, it could not finance the costs of those wars. (In this respect the consumption of the royal household itself may have been no small element). No only did the son and grandson of Charles (Philip I, Philip II) bankrupt the Spanish treasury three (3) times between 1556 and 1650; from 1570 to 1607, the Spanish Army of Flanders alone mutinied 47 times, and in almost all cases the central issue of back wages which the regime often simply did not have the wherewithal to pay. See Geoffrey Parker, *The Army of Flanders and the Spanish Road, 1567-1659*. Cambridge, 1972: 290-292 (Appendix J).

* Headed by an emperor, the *Bakufu* was an institution of the dynastic royal family, its household and administration. During this era, that of Ashikaga decadence (circa 1467, the outbreak of the Ōnin War i, to 1560, the moment of Oda Nobunaga's victory at Okehazama), of *feudal decadence*, the *Bakufu* was virtually powerless as the country was controlled by antagonistic regionally-based great lords, the *daimyō*.

The formal domination of capital reached its limits in confronting both historically constituted, major forms of human sociation. Among archaic peoples, individuals would not willingly labor, and when enslaved and compelled to (those who survived infection and disease) they either abandoned the labor, running off into hills or forests where they could not be followed (as, for example, on the tobacco farms of colonial Virginia) or, free people not inured to labor, they died from exhaustion and hunger (as, for example, Indians forced to mine for gold in the streams of the Andes, suffering from the cold water and lack of adequate food).¹⁵²

Among tributary lords, the great men of Tsarism, the Mughal, and the Ottomans,¹⁵³ societies were closed off to European penetration as these ruling classes disdained trade and limited market-based circulation of goods. Europeans were confined to the urban settings on the peripheries of these Empires. Even among Chinese dynasts (the Ming in particular, and later the Ch'ing (Qing) or Manchu), and even though there was private property in land and movables, there was a Confucian-inspired hostility to trade, merchants and exchange. The Tokugawa were different. Not in that they were alone in being military despotic tributary lords, for so was the Tsar and his retinue. But in Japan after 1601, there were significantly large strata of merchants, an entire layer quite wealthy, there was large towns (the castle-towns of the *daimyō*), there was decades long shortages of coin yet there was even a general equivalent of sorts (though not a universal equivalent, money), namely, rice. "Monetization" did not entail the generalized circulation of money, i.e., coin, much less paper money (and to complicate matters bills of exchange did appear in the conduct of trade); rather, rice functioned as an equivalent in exchange, and even those bills of exchange were designed to facilitate trade based on rice. The lengthy historical absence (down to the first appearance of real domination in the West) of coin then paper money and, accordingly, the lack of a universal equivalent may have prevented the commodity form from pervading and shaping all social relations and, limited the levels of abstraction that obtained in and on the basis of those social relations, thus in thought as well. There was, in particular, nothing like the modern science of nature. (We shall come back to this.) But there were other crucial features to capitalism at its origins lacking in Japan as well.

Excepting Japan where a communal peasantry did not exist, had the formal movement of capital ever penetrated deeply into these tributary empires, they would have confronted the village commune. Here, in the black soil regions of Russia, in the Indian subcontinental interior, in Anatolia, Syria, Mesopotamia and other domains ruled by the Ottomans, agriculture was practiced communally. Even indigenous user's capital (e.g., the Bolshevik *bête noir*, the *kulak*) never functioned as an antediluvian form of capital. And it was *not* a question of primitive agricultural instruments and technical development. What was crucial was the periodic division of lands carried within the community in order to insure a certain palpable equality among its members. Capital could not penetrate this, and neither could the Bolsheviks. (It was the grain crisis of 1928 in which large-scale terror was brought to bear on *serednyak*, and the enforced collectivization that followed, that permitted the Stalinist faction to impose a "solution" to the peasant "problem" facing the regime.)¹⁵⁴

There were three conditions obtaining in western Europe and absent in tributary empires which held capital's formal domination at its peripheries and prohibited its deeper penetration.

First, there was no massive peasant dispossession and expropriate, with correspondingly proletarianization and formation of a class of wage laborers; second, in each all of these social formation (inclusive of Tokugawa) no socially significant group elaborated of a legal doctrine of absolute, unconditional private property as Objective Spirit,

¹⁵¹This two was an unknowing form of murder (well, except later among the British and the Americas, as military authorities handed out smallpox infected blankets to Indians either in negotiations or in the infamous reservations (i.e., concentration camps). See Ward Churchill, *A Little Matter of Genocide: Holocaust and Denial in the America 1492 to the Present*. San Francisco, 1997: 154-156.

There is one more, deeper level at which a murderous intentionality operates:

The very diseases that destroyed the demographic integrity of native populations were *not immutable biological facts*. Both the diseases and physiological immunities of settler colonists to common diseases such as small pox in particular but also to measles, dysentery, mumps, whooping cough, chicken pox, etc., were the product of millennia of the enforced impoverishment of European rural masses. *Those immunities were constituted over thousands of years* as peasants lived in closed, close and shared quarters with their livestock, primarily cattle, pigs, sheep, goats and chicken. If cows or lambs provided warmth as peasants slept among or on them, or human mothers wet nursed infant motherless animals, it was because of *savage inequalities* that produced a situation in which one family had a cow and some chickens, while another had herds of cattle or sheep, for example, that numbered in the tens or hundreds of thousands (as did the great Castilian lords engaged in transhumant sheep herding, seasonally moving millions of sheep between Leon and Castile in the North and Andalusia in the south). *Rooted in millennia of class division, disease grounded devastation was a culturally formed phenomenon, when not thrust on indigenous peoples in manifestly genocidal practices then always cynically a free gift of European societies to undivided native societies. It was the immunologically congealed expression of the internal barbarity and criminality of European societies themselves.*

¹⁵²Never mind that there was little if any gold to be discovered this way, at musket point the Spanish compelled Indians to do so. Not all Europeans were as brutal. The French attempted to force their Catholicism on the Hurons, Iroquois, etc., but they did not engage in large-scale murder. There was, though, indeed something genocidal in the English Puritan and Spanish Catholic spirit.

¹⁵³We have already seen that the two other great modern tributary formations, the Aztec and the Inca, were ultimately subdued by the ravages of disease, which proved to both them and their conquerors that the latter's god was superior. They submitted.

¹⁵⁴See the account in "Original Accumulation," below.

and, third, all were absent the development of the modern science of nature, and had no cognitive form of awareness remotely similar to it.

Besides the obvious reason of setting the stage for the appearance of real domination, relative surplus-value extraction and production for production's sake, it has been important to reconstruct *the formal circuits along which capital's domination over labor in production moved* because it along these *same circuits that the wealth, the objective substance of entire communities and small societies moved* (as can be seen in the routes silver traversed) *which constituted what was appropriated and expropriated in what Marx, as we shall see, called original accumulation*. Yet under the epochal conditions of the formal domination of capital over labor in production, where not engaged strictly in trade, long-distance and otherwise, the merchant as capitalist only extracted absolute surplus-value...

Relative Surplus-Value, Real Domination Premised by the Modern Science of Nature Preliminary Remarks

In *Capital*, the analyses of the labor process (production), the circulation process and their unity (the process of capitalist production as a whole) predominate to the point of exclusivity. Effectively, Marx's theoretical analyses and their premises deny what his historical analyses invariably confirm, namely, the centrality of ideational features for human activity and interaction, that is, for any large-scale social transformations which may entail natural ones as well. (This is a centrality rooted in the very being of man.)¹⁵⁵

Take, for instance, *The Eighteen Brumaire of Louis Napoleon*.

Class is invariably complexly mediated. (What, pray tell, would make anyone think its determination is singular, that it, or consciousness of class itself, could be arrived at from an imputation based on the process of production?) In a passage concerning the conservative French peasantry Marx specifies a mode of living and a community of interest that opposes one class to others, and within that community interaction, political organization and a national bond (a determinant far more decisive for the epoch of formal domination). In the very next paragraph, however, he also refers to assimilated historical tradition, belief and hope borne by the same peasantry vis-a-vis Louis Napoleon; and he speaks about these (precognitive) aspects of consciousness as determinants of the peasants as a class, obviously though not as a revolutionary class.¹⁵⁶

The establishment of capitalist production by way of either the assimilative destruction or outright destruction of all previous communities, and forms of productive activities together with the societies that rose from them, certainly constitutes one of the two great large-scale transformations (necessarily entailing natural ones) in human history as a whole.¹⁵⁷ Together with the expropriation of the peasant proprietor and formation of a class of propertyless, waged laborers, there were two ideational features which were necessary to the ascendancy of capitalism. The first, elaboration of a concept of absolute and unconditional private property, has already been touched upon;¹⁵⁸ the second was the modern science of nature.

Relative Surplus-Value, Real Domination Premised by the Modern Science of Nature The Bourgeoisie, Science and Capital

In history, a second way of increasing the rate of exploitation of waged labor appears. It has been and is accomplished by reorganizing, or incorporating new machinery into, the work process in order to produce the same or greater mass of a specific commodity in a shorter period of time.¹⁵⁹ Marx tells us, "Should he make two pair of boots in the same time, the productivity of his labor must be doubled; and the pair cannot be doubled without a change in his tools or in his method of work, or both. There must be, then a revolution in the conditions of production of his labor, i.e., his mode of production and, thus the labor process itself."¹⁶⁰ In other words, the rate of exploitation can not

¹⁵⁵ *The Materialist Dialectic*, "The Appearance of Spirit."

¹⁵⁶ *MEGA I/11 Werke, Artikel, Entwürfe (Der achtzehnte Brumaire des Louis Napoleon)*, 180.

¹⁵⁷ The other was the rise and diffusion of agriculture.

¹⁵⁸ See the Preface, *The Formal Domination of Capital over Labor as an Epoch in the History of Capitalism*.

It has only been touched upon because its significance in this regard is not in doubt.

¹⁵⁹ *Das Kapital*, I, 10: 283.

¹⁶⁰ "Soll er in derselben Zeit zwei Paar Stiefel machen, so muß sich die Produktivkraft seiner Arbeit verdoppeln, und sie kann sich nicht verdoppeln ohne eine Aenderung in seinen Arbeitsmitteln oder seiner Arbeitsmethode oder beiden zugleich. Es muß daher eine Revolution in den Produktionsbedingungen seiner Arbeit eintreten, d. h. in seiner Produktionsweise und daher im Arbeitsproceß selbst." *Ibid*. The "he" referred to is, of course, the cobbler.

Marx continues, "By an increase in the productivity of labor, we mean a change altogether in the labor process as a result of which the labor-time socially necessary for the production of a commodity is shortened, endowing a given quantity of labor with the power of producing a greater quantity of use-values. In the course of treating the production of surplus-value in the form considered earlier, we have assumed the mode of production as given. But when surplus-value has to be produced by the conversion of necessary labor into surplus labor, it by no means suffices for capital to take over the labor process in its existing or historically transmitted shape, and then simply to prolong its duration. The technical and social conditions of the labor process and thus the mode of production itself must be radically changed for the productivity of labor to increase. Then with the increase in the productivity of labor, the value of labor-power

only be raised by lengthening the working day with its reorganization and, or, by bringing to bear new technical inputs, new machinery, on the work process, or, again, by combining a lengthening of the working day with a transformation of the labor processes.

In contrast to absolute surplus-value production generated by lengthening the working day, "I call that surplus-value which arises from reduction of necessary labor-time, and from the corresponding alteration in the respective lengths of the two components of the working day, relative surplus-value."¹⁶¹ This form of surplus-value extraction entails direct intervention by the capitalist in the work process, and that intervention has enormous consequences: The "production of relative surplus-value altogether revolutionizes the technical processes of labor and societal groupings."¹⁶² Marx characterizes production in this form as the real subsumption (domination) of capital over labor.¹⁶³

Marx enumerates three forms of productive activity in which the extraction of relative surplus-value is carried out. He calls these cooperation (chapter 11), division of labor and manufacture (chapter 12), and machinery and large industry (chapter 13). In the first form, the capitalist brings together large numbers of workers together under one roof. Excepting the sheer numbers of workers employed, this form can hardly be distinguished from the large workshop of master artisans in the high or mature eras of capital's epochal formal domination. Yet it remains the basis for any further "development"; and thus, the drive for surplus-value pushes the capitalist further; he cannot stop here and he directly intervenes in the work processes by reorganizing work itself. He rationalizes it: He divides and subdivides tasks, assigning groups of workers to single steps in what was once a unitary practice and process. Still, this is inadequate, and the Rubicon, as it were, is finally crossed as he introduces machines into his large-scale industrial enterprise. Marx believes, mistakenly in our view, that this shift is qualitative because it robs cooperation and manufacturer of its basis in handicraft skill as the machine recreates workers as specialized components of a collective worker (*Gesamtarbeiter*).¹⁶⁴

will fall, and the part of the working day necessary for the reproduction of this value will shorten." („Unter Erhöhung der Produktivkraft der Arbeit verstehen wir hier überhaupt eine Veränderung im Arbeitsproceß, wodurch die zur Produktion einer Ware gesellschaftlich erheischte Arbeitszeit verkürzt wird, ein kleines Quantum Arbeit also die Kraft erwirbt, ein größeres Quantum Gebrauchswert zu produciren. Während also bei der Produktion des Mehrwerts in der bisher betrachteten Form die Produktionsweise als gegeben unterstellt war, genügt es für die Produktion von Mehrwert durch Verwandlung notwendiger Arbeit in Mehrarbeit keineswegs, daß das Kapital sich des Arbeitsprocesses in seiner historisch überlieferten oder vorhandenen Gestalt bemächtigt und nur seine Dauer verlängert. Es muß die technischen und gesellschaftlichen Bedingungen des Arbeitsprocesses, also die Produktionsweise selbst umwälzen, um die Produktivkraft der Arbeit zu erhöhen, durch die Erhöhung der Produktivkraft der Arbeit den Wert der Arbeitskraft zu senken und so den zur Reproduktion dieses Werts notwendigen Teil des Arbeitstags zu verkürzen.") *Ibid*, 283-284.

¹⁶¹„... nenne ich... den Mehrwert dagegen, der aus Verkürzung der notwendigen Arbeitszeit und entsprechender Veränderung im Größenverhältniß der beiden Bestandteile des Arbeitstags entspringt, - relativen Mehrwerth." *Ibid*, 284.

He adds, "In order for the value of labor-power to fall, the enhanced labor productivity must take hold of those branches of industry whose products determine the value of labor-power, and consequently either fall with the view of customary means of subsistence, or are capable of replacing them." („Um den Wert der Arbeitskraft zu senken, muß die Steigerung der Produktivkraft Industriezweige ergreifen, deren Produkte den Wert der Arbeitskraft bestimmen, also entweder dem Umkreis der gewohnheitsmäßigen Lebensmittel angehören oder sie ersetzen können.") *Ibid*.

¹⁶²„... die Produktion des relativen Mehrwerths revolutionirt durch und durch die technischen Prozesse der Arbeit und die gesellschaftlichen Gruppierungen." *Das Kapital*, I, 16: 458.

¹⁶³*Ibid*: MEGA II.4.1. *Ökonomische Manuskripte, 1863-1867. Resultate* („Reellen Subsumtion der Arbeit unter das Capital"), 104-105.

¹⁶⁴He is mistaken for two reasons.

First, a collective worker is already present once work is highly rationalized. No single laborer any longer produces a whole product, and it is increasingly difficult to grasp the whole as the numbers of workers engaged in partial tasks increase. Handicraft skill has already disappeared and *Teilmenschen* begin to appear as soon as this occurs.

Second, Marx is biased toward technical inputs, a consequence (exhibited perhaps most forcibly in the *Communist Manifesto*) of his enthrallment with sheer power of the gigantic transformation of built environment and natural landscapes already ongoing in his own time, once scientific inputs into production become at once generalized and ongoing.

The bias is just that, and cannot be sustained as developments, e.g., in our time, demonstrate. Take, for instance, the Toyota Camry auto plant constructed in Georgetown, Kentucky in mid-2000s. Or course, the plant was built on the foundations of existing levels of machine technology, hence real domination in production as a global phenomenon. Yet there production is carried out by teams who produce a single vehicle from the starting point of assembly to completion as a finished product. The interesting thing is that Toyota build its auto complex qualitatively cheaper (suggesting less sophisticated technical inputs) than GM did its Saturn plant in Spring Hill, Tennessee at about the same time, with lines that are not only *non-robotic* but were, even then, considered *antiquated*. Yet Toyota's production capacity has matched and bettered more technically advanced auto plants, and for years its Camry produced in Georgetown has been the "number one selling auto" in the United States.

Recruiting non-proletarians previously engaged in marginal agriculture work (tobacco farming), precarious labor, lots of rural folk, these "participatory" schemes have been effective, since the new workers, engaged in making a whole product, are not subject to the most degrading, fragmentarizing effects of continuous flow (Taylorized or scientific, assembly line) production. The antiquated line and team production increase productivity of labor, and with this increase the need for "skilled" labor declines, particularly on the shopfloor. As a type, the worker required (and produced) in this kind of production, the Japanese call her an "integrated worker," has few identifiable skills; educationally or vocationally the main requirement is a fit with the "team." The skill and knowledge that is formed is collective, a product of the activity of the team; and, it, this achieved insight, can be incorporated into the physical assembly by a built-

What distinguishes production in this form? In the first place and most obviously, it is the constant revolutionizing of production by way of ever new technical inputs: "With the real subsumption of labor under capital there takes place a complete (and a constant, continuous, and repeated) revolution in the mode of production itself, in the productivity of labor and in the relation of capitalist and worker."¹⁶⁵

And what, pray tell, is responsible for continual revolution in production? We can cite two passages appearing in *Capital*: The separation, and with it the loss, of individual worker skill and knowledge and it embodied in the labor processes "is completed in modern industry, which makes science a productive force distinct from labor and presses it into the service of capital."¹⁶⁶ Here it is (the movement of) capital which draws science into production. True, but analytically superficial.

"In the form of machinery and as a material mode of existence, the instruments of labor require the replacement of human power with natural forces, of routine experience with the conscious application of natural science."¹⁶⁷ Machinery, in other words, calls forth, demands, the "application" of science. Here causation is if anything backward, and mystifying to boot.

What Marx does not, and cannot, recognize is that the modern science of nature (which he corrected identifies as "natural science," *Naturwissenschaft*, in the passage above), is not "applied" to production *ex post facto*, after or even as machine production 'demands' the substitution of "natural forces" for human ones.

There are several criticisms appropriate to this line of thought: First, the modern science of nature has long preceded real domination and relative surplus-value extraction at their origins, because their connection, nay their belated unity, is predicated on a class relation which links capitalist production and modern science; second, the modern science of nature is not external to capitalist production; no "application" is required, they are internally linked and one is not possible without the other, they are effectively cause and effect of each other. This can be demonstrated through historical analysis; and, third, relative surplus-value and with it real domination is not just brought on with this "necessary" "application," it is the *systematic, sustained* presence of science in production, scientific "inputs" if you must, that not only creates self-valorizing value but makes it the *irreversible* direction of capitalist development.

We shall take these moments in our critique in reverse, ascending from what is given, and in some respects obviously to what is hidden, obfuscated and mystified, and ideologized, not the least because of its ubiquitous presence in daily life.

We can, then, begin with the *third* element of our critique.

The systematic, sustained relation of science to production should have been already intuitively obvious, patent and manifest, before the advent of the third quarter of the chronological nineteenth century. By then the magnitude of strictly capitalist operations had long been large enough to call forth this development, one which was, as we shall see, given with the very character of science itself.

How is possible not to grasp that it is in the subjection of production wholly to scientific determination that capitalism established itself on its own foundations?¹⁶⁸ Give this a little thought, and while you do, reflect on the following also:

in feedback, as a member of the team, on occasion, stops the line and team members and supervisors evaluate the "criticism."

Thus, the requirements (and product) of work expel residue skill (in the historical sense) from the production process (holding down the remuneration of labor as a cost of production), and the structure of work and interaction allows for continuous incremental improvement that permits capital, in this case auto capital, to keep reducing its cost without technological inputs.

¹⁶⁵ "Mit der realen Subsumtion der Arbeit unter das Capital findet eine völlige (und sich beständig fortsetzende und wiederholende) Revolution in der Produktionsweise selbst statt, in der Productivität der Arbeit und im Verhältniß von Capitalist und Arbeiter." MEGA IV/4.1. *Ökonomische Manuskripte 1863–1867, Resultate* („Reellen Subsumtion der Arbeit unter das Capital"), 105.

¹⁶⁶ "Er [that separation] vollendet sich in der großen Industrie, welche die Wissenschaft als selbständige Produktionspotenz von der Arbeit trennt und in den Dienst des Kapitals preßt." *Das Kapital*, I, 12.5: 326.

¹⁶⁷ "Als Maschinerie erhält das Arbeitsmittel eine materielle Existenzweise, welche Ersetzung der Menschenkraft durch Naturkräfte und erfahrungsmäßiger Routine durch bewußte Anwendung der Naturwissenschaft bedingt." *Ibid*, I, 13.1: 346-347.

Then there is a similar passage in the *Resultate*:

„Bei der realen Subsumtion der Arbeit unter das Capital treten alle früher von uns entwickelten changes im Arbeitsproceß selbst ein. Es werden die *socialen Productivkräfte der Arbeit* entwickelt und es wird mit der Arbeit auf grosser Stufenleiter die Anwendung von Wissenschaft und Maschinerie auf die unmittelbare Production. Einerseits schafft die *kapitalistische Produktionsweise*, die sich jetzt als eine Produktionsweise *sui generis* gestaltet, eine veränderte Gestalt der materiellen Production" ("With the real subsumption of labor under capital, all the changes in the labor process discussed earlier now become real. The *social productive powers* of labor are developed, and with labor on a large scale comes the direct application of natural science and machine technology to immediate production. On the other hand, *capitalist production* now established itself as a mode of production *sui generis* and transforms the shape of material production."). *Ibid*.

¹⁶⁸ The failure to apprehend this, Marx's and that of the overwhelming number of his followers, is predicated on a view for which ideation and conceptual production are a mere "superstructure" raised over a "material" basis, the processes of production. While theory rises from social and historical contents, i.e., it is not independent of experience, the relation between ideality and practice is far more complex. In any thoroughgoing account of the real or any of its aspects, they cannot be considered apart, and one certainly cannot proceed causally from one to the other. For a theoretical statement of this relation, *and its foundations*, see both the conclusion, "The Appearance of Spirit," to *The Materialist Dialectic* and *The Critique of Science*, Third Study, Note₂ (*Dialectic of the*

Ask if the worlds of ancient and modern tributary formations knew iron, copper, lead, silver and gold, how, apart from the scientific exploitation of mineral resources, might have manganese, cobalt and any number of rare earth minerals been discovered, utilized, and then become incorporated into specific, industrial processes in the epoch of the real domination of labor under capital? How without a scientifically established, chemical analysis of their components considered physically?

In pursuing the *second* moment of our critique we may also shed a little more light on the third.

We can start with the relation of science to capital as capital (self-valorizing value) which at its origins occurred irregularly (i.e., scientific "inputs" into production were not yet systematic and sustained). In this regard, science and production nonetheless were interlocked, their developments going hand in hand, and in still other (many) cases, the science *preceded*, shaping, developments in production.

Exemplary in the former respect was the relation of bearers of both (modern science and strictly capitalist production), Josiah Wedgwood the china manufacturer and Joseph Priestly scientist and chemist. As a scientist Priestly consciously, deliberately and with a view to utilitarian outcomes pursued his work largely as experimentation (in the fully modern, not Galileo's, sense). Wedgwood (Charles Darwin's maternal grandfather), on the other hand, a master potter with a pronounced scientific bent, had built a ceramic, earthenware and china factory in Burslem (near Birmingham) in the 1760s. He employed chemical processes and treatments in his works that were directly related to his scientific interests. In other words, in practical way he was already a "scientist." After 1780, he was in close contact with Joseph Priestly (after the latter set up his ministry in Birmingham). Priestly's experiments, in turn, afforded Wedgwood with insight that, related to clay and color, improved output in his china factory. In similar fashion, a number of important innovations and inventions resting on scientific knowledge and understanding were embodied in devices, processes and procedures between, say, 1760 and 1825.

In the latter respect (precedence of science over production), we have, for example, Claude Berthollet who created chlorine bleach, which, as Rondo Cameron indicates,¹⁶⁹ formed the foundations for heavy chemical industry throughout the early epoch of real domination. We also see a reversal of this relation in the following: Though James Watt was not especially scientifically adept, work with his steam engine and its developments formed the basis for elaboration of the laws of thermodynamics, particularly the second proposed by Rudolf Classius in 1850. In other words, overall we can apprehend that the elaborate developments of modern science and capitalist production were, as we said, cause and effect of each other.

This relation was systematized by (first) the (French) state through the establishment and funding of higher educative and technical schools. These schools employed *renowned scientists* as faculty. To students, faculty imparted the methods of measurement (e.g., the metric system), calculation and classification originally developed in the sciences of nature and mathematics. Students were methodically trained in various fields of constructive human endeavor. These included, most importantly, mineral extraction (mining); surveying, road and bridge and rail, canal and port, civil and naval architectural and fortifications construction; etc., with the same aims, now institutionally incarnated, of advancing scientific knowledge for the purposes of exploiting the Earth, understanding, harnessing and even creating (new) material processes in nature. Obviously, the civil engineer occupied pride of place in all these developments, and the French... starting from the Convention of 1792-1793 and from Napoleonic decree... were the first to establish a whole series of schools, institutes and facilities which embodied these aims,¹⁷⁰ and which trained military and civilians engineers, technicians and scientists engaged by private firms, all of whom in turn brought scientific concepts, methods and rationality directly to bear on production. Abroad, not just within the territorial confines of France, the various courts and regimes of Europe and further afield employed French engineers and scientists for some of the most important productive developments from 1825 down to the advent of imperialism in the arena of the world (1870).¹⁷¹ Students from all over Europe studied in French schools, and in this way bourgeois notions of order, efficiency and rationality, and material progress, were diffused through the traditional intelligentsias, merchants and retailers, fledgling industrialists, the business classes generally, on the continent and in areas of colonial penetration.

Concrete: Unity of Method, Epistemology and Ontology in the Theory of Truth).

¹⁶⁹France and the Economic Development of Europe, 44. Similarly, Eric Hobsbawm (*The Age of Capital*, 42) remarks, "the artificial dye-stuffs industry... came from the laboratory to the factory."

¹⁷⁰Cameron, *Ibid.*, 43, 45-54.

¹⁷¹French engineers developed the coal and steel industries of Russia (including today's Polish Silesia); introduced the Bessemer converter and an internationally competitive locomotive factory in Austria; were responsible for the advance of iron manufacture (introduction of the rolling mill, improvements in puddling process) and a good deal of the industrial infrastructure of central Italy; developed safety and technical mining procedures in Westphalia; undertook and were in charge of infrastructural development in northern Egypt (irrigation, embankment and damming in the lower Nile, and road, canal and port construction in Alexandria); and similar infrastructure (roads, bridges, ports, public buildings and sanitation systems, and railways) in Wallachia (Romania), and built, having designed, bridges spanning most of Europe's great rivers as well as harbor and dock works for half Europe's seaports. *Ibid.*, 57, 58, 55, 59, 93, 95, 96, 101.

Those seaports included Antwerp and Zeebrugge (Belgium), Lisbon and Oporto (Portugal), Cádiz (Spain), Leghorn (Livorno) and Genoa and Trieste (Italy), Fiume (Rejeka, Croatia), Salonica (Greece), and Constantinople (Istanbul, Turkey) among others. *Ibid.*, 101, n. 54.

This was (and is) the movement from science to capital (generating it in its fixed form) at its origins. But the movement was (and is) reciprocal: Once scientific procedures organized work processes, and once machines constructed on the basis of scientific principles were deployed in production, the mastery of work, production and machinery required and demanded the assimilation of the common understanding of science of the day (at whatever level this understanding existed), and, as in the case of the steam engine alluded to above, even occasionally was the point of departure for novel scientific theorizations. In the same manner, capital investment where there had been none or little before constituted as such a diffusion of science and modern technology. (And, similarly, where work, production and machinery have already been fully placed on scientific foundations, capital investment that incarnates advanced or even novel scientific principles raises the level of that common understanding, infusing social awareness with a physicalist vision of reality, or there is no mastery of production and work) ... *It was at this precise moment, that at which inputs to (machinery in) production require scientific understanding and awareness to minimally operate and maintain them, that real domination in production, the development of capitalism, capital as capital, became irreversible...* There is here a movement from capital back to science, which completes an incessantly growing and developing circle that is necessary for and essential to the expanded reproduction of capital. This is the service science renders capital, demonstrating their internal affinity and inseparably, which becomes ever tighter the more real domination develops as an epoch in the history of capitalism...

So now return to our *first* criticism of Marx vis-a-vis science. This concerns the class relation that underpins the intimate, immanent relation of the modern science of nature to capitalist production.¹⁷²

Though it is common *productivist* error to grasp the connection between modern science and abstract labor in terms

¹⁷²If we go back to the concluding discussion to the previous section ("Absolute Surplus-Value and the Formal Circuits of the Movement of Capital"), we can demonstrate there is clear, decisive evidence within western Europe (and not just the tributary empires of the world in the high era of capital's epochal formal domination) that strictly capitalist production (value as self-valorizing) is not possible without the modern science of nature. That evidence concerns the most advanced national development of formal domination at reached epochal maturity. It concerns the Dutch Republic. (For detailed, an exhaustive, treatment of what follows, see *The Critique of Science*, First Study, Note₁ (*Dutch Capitalism and the Novel Modern Science of Nature*):

From no later than 1648 onward, the Dutch exhibited the most advanced coordinates of the development of technologies that pushed forward capital's formal domination in production. Yet they were unable to establish capitalism on its own foundations as self-valorizing value. Why? The simple answer is that *significant* (i.e., *Orthodox*) layers of the Calvinist Dutch bourgeoisie repudiated the mechanics which from Galileo through Newton to Einstein and Heisenberg formed the central core of modern scientific doctrine (these layers it identified with Cartesianism), and this refusal ensured that a ruling class that was indifferent to theory in the first place did not pursue the development of the modern science of nature as social policy.

In numerous spheres of social practice... in livestock breeding, in agriculture with the introduction of new "industrial" crops, in dairy farming with the use of churn mills, and with respect to "infrastructure," in the construction of dikes, ditches, locks, bridges, sluices and moles in a bourgeois nation forced to hold back the sea as a condition of its very existence... the Dutch made significantly more "productivity" advances than any other power (above all, England) in Europe, perhaps in the world. Yet there was something essentially characterizing their machine technologies that prevented them from making the breakthrough, so-called, to real subsumption and relative surplus-value extraction from waged labor. The Dutch were not backwards, slow or un-innovative; to the contrary, among the Dutch inventiveness and technological prowess had reached *its upper limits achievable under the overarching regime of capital's formal domination over labor in production*. This issue turns on the specific sense of the mechanics incarnated in each and all devices or instrument-complexes, technologies if you will, deployed by the Dutch: It is the a question of the utilization of naturally given force (i.e., the movement of water, air currents in the case of windmills, and above all human, horse or dog effort to power the devices and instruments) in order to *additively* increase human power, as opposed to, first, the generation of novel force (at first natural, such as steam) to, second, *multiply* that power in efforts aimed at nature mastery. It is modern mechanics that made this transformation possible. (In essence, it is a matter of breaking with qualitative Aristotelian traditions of the analysis of movement and quantifying motion.) The transformation and break entails a wholly different vision of nature and world, one in which nature lacks any hierarchy of being, in which nature is merely bodies in motion, in which those bodies have meaning and being that is exhaustively grasped in terms of number.

Ideologically and politically tied to the most Orthodox Dutch Calvinist clergy, decidedly important layers of the Dutch bourgeoisie (of which that clergy itself was largely an element of) accepted the Calvinist refusal of modern mechanics; they would not abandon Aristotle for the new mechanics, i.e., mathematize bodies and their motion; that is, for the Dutch reformed Church, *moral-cognitive conviction about the right (divine) order of nature and the universe set forth in more or less Aristotelian categories, mortal fear for their immortal souls, apprehension about loss of ideological control over both the intelligentsia formed in public universities and over the plebeian sorts, the Dutch masses, and political hegemony over society were all indissolubly intertwined*; and, to be sure, in all these respects, Calvinism was central to the Dutch mercantile bourgeoisie. The basic issue was that of "natural place" understood in the specifically Christian (that is, Aristotelian-Thomist) sense, i.e., *the issue of the moral order of the universe, which Cartesianism in particular and modern science generally effectively overturned, and in overturning it undercut the status and power of the Calvinist clergy who in a scientific universe would lose its grand justification and purpose, and in whose world the Dutch mercantile bourgeoisie would lose the theological props of its power...* These were precisely those features of the new mechanics at dead heart of the novel science of nature which gave it its intrinsically technological character, made possible realization of its inner animating *telos*, nature domination, and inseparably linked it to bourgeois tasks in history turning on endless expansion of productive forces. *Rising to the mathematical, quantifying perspective of modern mechanics was an impossible achievement for those, Orthodox Calvinists, who saw and understood nature in its intelligibility as a manifestation of divine power, divine order and divine grace.*

It is in the elaboration of this shorthand account that a comprehension of the failure of the Dutch bourgeoisie to make the breakthrough to real subsumption (domination) and relative surplus-value extraction lies.

of the general development of society, hence to see in science the intellectual patrimony of humanity, it remains an error. Science is neither; instead, it is *historically specific form of knowledge*, the *class theory of the bourgeoisie*, *mystified and obfuscated inasmuch science has become socially generalized form of knowledge*, *its concepts have become barbaric common sense*, and *it has been materialized in the very built environment*.

Yet the modern science of nature remains bourgeois science. The internal, necessary relation of science to the bourgeoisie can be grasped in different, distinctive ways; first, in the vision of the world (man, community, nature) projected by science at its origins in its struggle against the old social order and in contradistinction to the old nature philosophy and its vision, theoretically expressing the organization of that old order; second, it can be grasped in the internal conceptual structure of science itself in *its* structural similarity to the value form; third, in the homology between the original, social and precognitive *telos* of science at its origins and bourgeois tasks (expansion of productive forces); and fourth, societally, in the validation of scientific "laws" through technological achievements linked to expansion of productivity, precisely what Marx applauded. Summarily demonstrating these connections imposes two requirements on us, namely, exhibiting the internal, historical connection of the bourgeoisie as a class to science as theory, and demonstrating that significant elements of the internal conceptual structure of science are inseparable from the bourgeois process of accumulation, that is, seeing and recognizing the constitution of science as theory is indissolubly linked to production of the socio-historical world we call capitalism.

Let us begin by emphasizing that we are speaking of the bourgeoisie *as a class*. The concept of the bourgeoisie as it appears here is not designed to mask national differences, distinct life situations and the conflicting interests of this new class as a whole as it first emerged in history. This much said the concept remains unitary, one that cannot be relegated to the status of a construct, to say an ideal type. Instead it refers to the most enlightened individuals, especially to the social groups in which they were situated and which provided them with reality and their identities. In this respect, it was this essential sociality, a shared objective position in society together with, and above all, a commonly held, specific ideational insights that permitted these individuals to mutually recognize one another *and* to realize and appreciate that the new class they relationally formed could not freely breathe the air of the old order, rather its atmosphere would choke and suffocate it and them.

The first of these enlightened individuals began to appear among new social groups late in the history of the urban enclaves of a Mediterranean social formation, especially in the Italian Peninsula and then in the Low Countries. They first appeared in two distinctive, quite different social strata in the late 15th and early 16th centuries, namely, as master craftsmen among the great artisans and as declassed humanist intellectuals... Their children, as we know, will be bourgeois... Across these distinctive social strata, objectively without recognition, they came together in elaborating a critique of Aristotelian nature philosophy, or its medieval, Scholastic development and presentation. After 1600, however, they became familiar with one another; there was active, subjective convergence: They sought each out. Modern science at its origins bore the mark of their critique, and cannot be understood apart from it.

Central to and decisive for this relation was the type of *technical* knowledge formed in the activities of the great artisans: It was self-conscious knowledge, so what declassed humanistic intellectuals recognized in it was that which great artisans already understood: This technical knowledge was characteristically, and in its inner essence (so many of the intellectuals argued), inventive, cooperative, progressive, *and* perfectible. It followed, and these intellectuals explicitly noted, the methods and procedures of artisans, technicians and engineers were cultural forms leading to a progressive, cumulative enlargement of knowledge on which society... one they might someday hegemonize... itself could be based. Science, as the elaboration, refinement and deepening, and theorization, of these methods and procedures (taken together constituting a qualitative transformation of them), developed out of the convergence, interaction and practice of these two strata... no longer distinct but as a bourgeois intelligentsia... over two or three generations. Learned men writing and publishing in the vernacular as opposed to the traditional Latin symbolized their convergence, whether the language was English, Italian or French. As layers of a class in the historical process of formation, as large merchants and cloth manufacturers, great artisans becoming industrialists, big peasants becoming capitalist farmers, differentiated themselves out of estates (*Stände*) of the older social formations of Europe, an identifiable organic intelligentsia of bourgeois origins... the first true men of science... began to appear by no later than 1600, and set themselves apart by uniting methodical, rational procedure with experimental and observational practices. Among the very greatest of these men we number Galileo, Bacon, Gilbert and, perhaps Descartes (perhaps, because there was very little in the way of experiment and observation in his work).

Retrospectively, we can see that on the basis of the critical elaborations of the relations of the mechanical arts to theory carried out by several generations of late 16th century urban great artisans and declassed humanist scholars, an intellectual layer of 17th century classical bourgeoisies (i.e., educated social layers born of the strata above as they emerged in the Italian republics, Dutch and French urban enclaves, and in London and the English countryside) created and developed the modern science of nature complexly mediating the daily bourgeois practice of accumulation.

But how and when?

Step back and examine that moment at which the new class implicitly recognized itself, i.e., in its divergence from the

old order. It was the life-activities (accumulation of money wealth, later capital) of this new class that permitted it to raise itself to this understanding: Usury laws, guild regulations, a religiously sanctioned cultural atmosphere dictating the obligations of the lord as master of labor and limiting exploitation of that labor (or, alternately, in the case of bourgeois intellectuals establishing the onto-theological premises of inquiry which it could not question), etc., hamstrung its activity and made it clear it could not flourish in the old order, particularly with a view to unquestioned Church authority, and craft and seigniorial relations governing production.

And, in this regard, science?

Science, an intellectual production disclosing the structure of the naturally real, was designed by its creators (again, Galileo and Bacon, Gilbert, Descartes, others) as a theoretical weapon in a genuinely fierce *struggle against the Church* and its largely clerical intelligentsia, the Catholic princes who supported it and the great power kingship (Castile) which spearheaded its military self-defense (against the Ottomans, against Calvinist-shaped revolt in the Spanish Netherlands, against the heretical English), even the massive peasant strata that dumbly provided the Church its social basis, a struggle over the vision of the world (in astronomy and physics) and for the autonomy of thought (i.e., for and against those "innovators," like Galileo, who think). Simultaneously it, science, was a conceptual formulation of both the practical and theoretical conditions and means of the mastery of nature to "lessen the labor of man" (Descartes), i.e., to increase the so-called productive forces of society.¹⁷³ Stated differently, in opening up vistas of nature mastery and domination it was science that allowed this class as a whole... as it formed from large merchants, great artisans, gentry gentlemen and big farmers... to intuitively albeit obliquely grasp... an understanding mediated by concepts of personal salvation, doing God's work, self-enrichment and creation of national wealth... the significance of the compulsion that at any rate gripped it, the expansion of productive forces of society and humanity. In the objective historical sense, it was a theory mediating the practice of a rising class slowly becoming conscious that its existence, social independence in the pursuit of its life practices and its cognitive elaborations (science itself and later, modeled on it, the science of society, political economy) required its own societal hegemony. That is, *this understanding came together and resolved itself into the insight that the creation of a new social order had to be theoretically mediated in a new way. In the end, it was this shared insight, and all its ramifications as they were grasped, that cohered the bourgeoisie allowing it to appear and act as a class in history.* In this context, we should recognize that *nature domination was (and continues to be) the point of contact between science and the bourgeoisie*, a social project governing a cognitive-cultural form that mediates itself to the class in whose life it is rooted and whose activity it intentionally directs. Beyond this, science legitimizes the bourgeoisie socially and historically: In its capital accumulative pursuit of nature domination in the interests of humanity as understood from the perspective of bourgeois society, science has and continues (especially today as a fused techno-science) to function as an ideational underpinning of the consciousness of a class that once aspired to universality, a belief that today has its translation in the vain, arrogant conviction that it is the only class that can organize society as a whole.

It should be clear, then, this elaboration of science, as the critical moment in the struggle against old order kingship resting on the insight that the creation of a new social order had to be theoretically mediated in a new way, involved the further insight among all bourgeois individuals who took even a passing interest in scientific studies: Their science was no mere theory. Rather it was embedded in... dialectically premising, issuing in and strengthening... a world vision. A dizzying flood of insights constituted the contents of this vision: Efficacious to this day, it entails a view of man, society and nature (*humanity* consists in privatized and egoistic individuals, *society* is organized around commodity production and exchange which pits these individuals each against all and, *nature* is an open, infinite, and deterministic universe formed of indivisible, individual elements). Science in this sense, that is, as a world vision, was intuitively transparent to the bourgeoisie because it immediately and practically illuminated its activities in production and society, *and* because it provided it with a sense of its role and function in history (a sense of which was emerging). It was not objectivity (i.e., position in society) and it was not activity as such, though to be sure there are formal points of identity; rather, it was precisely *this understanding* that, as we said, *cohered the bourgeoisie allowing it to appear and act as a class in history.* It is this vision of the world, and the science that underlines and in the end renders it intelligible, that has internally and historically connected the early commercial bourgeoisie (the cloth manufacturers, merchants, bankers and traders of the urban enclaves on the edges of the Mediterranean), who accumulated money-wealth but who had never engaged in capital accumulation, to later industrialists, capitalists in the strict sense (those who, more and more as mere personifications of capital, have since the early long nineteenth century systematically pursued accumulation through the organization of the work processes and their subordination to capitalist rationality), whose worldly outlook was thoroughly scientific and yet whose social existence lay three

¹⁷³«...diminuer le travail des hommes. » René Descartes, *Discours de la méthode* (1637), Première Partie. Accessed online under the heading, Édition électronique (ePub) v.: 1.0 : Les Échos du Maquis, 2011.

We may *believe*, mythically and ideologically, this struggle was merely an internal development within the intellectual history of the West or an argument among individuals over competing theories of nature, but these men (Bacon, Descartes, etc.) clearly understood what was at issue and what was at stake. We merely recall the title of one of Galileo's great works, *Dialogues Concerning the Two Chief World Systems*, and note the structure of this dialogue in which the Peripatetic views are subject to scrutiny and critique. See *The Critique of Science*, First Study, Part III, "Polemical and the Logics of Argument in the *Dialogue*," above.

centuries into the future beyond the formative period of science.

This satisfies our first requirement linking the bourgeoisie as a class to science as theory, broadly as a weapon in its struggle against leading elements of the old order in a struggle for societal dominance.

Second, we are required to trace out the internal connection or unitary structure that exhibits the inseparability of the internal conceptual structure of science and the bourgeois process of accumulation. This can be achieved largely by showing that this structure is indissolubly linked to the constitution of the socio-historical world we call capitalism by way of nature domination.

Development of productive forces is *not* what distinguishes the bourgeoisie as a class in history, particularly at its origins. Understood as a decisive feature of human history in its entirety, productive forces are a gross conceptual abstraction without real referent. The reality of productive forces is constituted during the course of capitalist development: The fundamental social requirement for their emergence, the productivity of labor, etc., is the institutional separation out of an economy from socially undifferentiated precapitalist formations, which in actual history rests on the social generalization of capital's formal domination over labor in production. Until this development occurs, it is utter nonsense to speak about productive forces and their role in history or, here, at the origins of capitalism.

What does distinguish the bourgeoisie as a class in history is the project of nature domination. At the same time, at its origins and prior to all explicit theorization and experimentation, the modern science of nature is motivated by the same *telos* of nature domination, an atheoretical yet comprehensive goal of scientific activity embedded in the internal conceptual structure of science as an anticipatory projection of a mathematized nature. This project (of nature domination), one that necessarily presupposes bourgeois life-practices centered on money (and later capital) accumulation, can be read off the internal conceptual structure of science itself.

Begin with *early* modern science. This beginning is not arbitrary: To make a case legitimizing the ambitions it pursues, a rising class is compelled to marshal any number of arguments, some rational and discursive, to justify itself, its social analysis, its prescriptions, those pursuits: Early modern science was the intellectual moment in a broader political struggle for societal hegemony. Its proponents effected a confrontation with the hitherto reigning cultural form of nature theory, the (Aristotelian) natural philosophy of old order kingship. That confrontation brought the conflicting, because incommensurate, conceptual and logical structures of the two competing theories into play, and, to a certain extent, the conflict itself allowed the advocate-practitioners of the new science to become conscious of this incommensurability. (For the most part precognitive, there was often a tacit sense of contradiction. Really it was just uneasiness. Here, early modern scientific thinkers did not expose this connection between the old natural philosophy and the old order because they in their whole beings were mobilized against a relativization of their own perspectives.) Yet precisely to this extent, these men also brought the broader political struggle itself to bear on the confrontation, i.e., in extra-theoretical efforts to legitimize their new science they made claims to a universality the burden of which their theory (and their social class), it was fervently believed, could shoulder. In appeals to a newly forming concept of "mankind," one taken over the narrow medieval concept of *humanitas* – essentially the community of Christian believers, they revealed their personal convictions animating this new science and, beyond this, the enduring class teleology that underpinned it. (Recall Bacon's remark from *The Great Instauration*, that the "ends of knowledge" cannot be sought "for superiority to others, or for profit, or fame, or power, or any of these inferior things; but for the benefit and use of life...").¹⁷⁴ For from out of the critique of the old theory of nature together with the elaboration of a new one, from science according to Bacon, "there may spring helps to man, and a line and race of inventions that may in some degree subdue and overcome the necessities and miseries of humanity."¹⁷⁵ i.e., again, expand those productive forces. If nature mastery could subjugate necessity rooted in (socially organized) material scarcity, then, *on the basis of its science*, the bourgeoisie would be carrying out this task in the very interests of humanity, instead of merely being a particular class engaged in the exploitation of labor by way of nature mastery.

As theorists of early modern science, men such as Galileo polemically aimed at truth, i.e., a theoretical activity uncovering the intelligible structure of reality itself, in a countermovement to older order, natural philosophy resting on Church dogma, that is, on the theologically determined Scholastic reading of Aristotle. Concealed in this countermovement to Aristotelian (Peripatetic) physics, was a view of the world, at once projected and presupposed by and in scientific thinking, that gave theoretical expression to the bourgeois vision of man, community, and nature. Since the struggle against Peripatetic natural philosophy was carried out largely on the terrain of the truth-value of competing theories, the social contents and precategorical interest structuring and organizing scientific theory were occluded. Thus, early scientific theorists did not expose the internal connection of the world vision projected by and underlying the old natural philosophy to the organization of a social formation based on exploitative social relations that reproduced landed, aristocratic power (i.e., the structural identity of a closed, hierarchically ordered, stable and static world, and the divinely ordained, unchanging world of lord, clergy, and peasant); nor, of course, did they then point out the former mirrored the latter, and that to extent the former was declared unchanging and unchangeable it

¹⁷⁴Francis Bacon, *The Great Instauration*, in *The Great Instauration and New Atlantis*. Arlington Heights (IL), 1980 (1620): 16, 25-26.

¹⁷⁵*Ibid.*, 26.

functioned as a cultural form justifying and legitimizing while masking the oppressive character of those social relations).

The failure of early modern scientific thinkers to do so was not merely because the historical conditions under which the analysis of "ideology" could be elaborated had yet to develop. Such an indictment would have straightaway led to a similar insight: It would have revealed (no matter how vague and ill-defined this insight) that the world viewed as an open, infinite, and internally unstructured universe (whose fundamental elements consisted of perceptually inaccessible, internally unrelated, and indivisible particles) had the same formal shape as bourgeois society in the process of formation; that is, it transposed into, at once concealing and mediately expressing in, thought the structure and organization of a world of isolated because privatized and egoistic individuals confronting an incomprehensible other (society) that was coming to be unconsciously organized around exchange, transforming social relations into a *bellum omnium in omnes*. Recognition of the social and, retrospectively, historical relativity of such an insight would have contradicted the principle of truth in the name of which struggle against the natural philosophy (Aristotelian physics) of old order kingship and Church dogma was carried out. (This very same principle of ahistorical truth and the blindness to an extra-theoretical, motivating interest were and remain intertwined. Taken together, they guaranteed the impossibility of thinking science at its origins as a social project and class-bound phenomenon.)

At its foundations and origins, the new science was a mechanics, a study of bodies in motion that considers these bodies strictly in their quantifiable, measurable aspect. (As such, it also would and does have tangible advantages over Aristotelian physics, but *only* from the practical-technical perspective of nature mastery. *It would otherwise be meaningless.*)

Galilean mechanics (similarly Newton's) takes as its point of departure sensuous nature, always understood from its instances, as an aggregate totality of bodies in motion, that is, it is regarded solely in its formal bodily, and hence quantifiable, aspects. The point of departure, then, already rests on an abstraction since sensuous nature (the apperceived totality of perceptual phenomena) always presents itself as an undivided whole, a unity of qualitative and quantitative, emotive and aesthetic characteristics. On the basis of this initial abstraction, the scientist proceeds to select data (phenomena) with a view to possible connections that hold between certain quantitative properties of phenomena... This was the key problem, a question of how to render phenomenal qualities, that data of sense experience, quantitative, hence, subject to number, i.e., to mathematical analysis... In and through a series of formalizing and mathematizing operations – additional abstractions, *products* of methodologically canalized *subjective* capacities of the scientist (her subjectivity), sensuous nature regarded quantitatively is further reduced to a series of formulae that express the "lawful regularity" of natural phenomena. In later developments (beyond Galileo), this regularity constituted in its lawfulness for the purposes of *prediction* can be subject to experimental validation (that is, the prediction can be validated or falsified.) This methodological orientation has very specific ramifications for what passes as scientific knowledge. Epistemologically, scientific thinking has arrived at bodies in motion, i.e., constituted them as such, by proceeding with observation and description on the basis of (i.e., in fact, *prior to all observation*) a distinction between primary and secondary qualities, quantity and quality, and, more radically, reality and illusion. This construction (bodies in motion, "matter") signifies the elimination of not only the sensuous characteristic of objects of scientific investigation but of emotive and valiative ones as well. It renders those bodies... remember science started from mechanics, so from bodies in motion... subject to mathematical analysis (actually, the anticipatory mathematical projection permits this analysis), which, in turn, will make prediction, experiment and validation, the deconstruction and reconstruction (i.e., the manipulation) of phenomenon, etc., possible.

Taken together, these abstractions thereby guarantee the postulate of a perspectiveless objectivity. They are, though, theory-laden constructions resting on an ontological projection. That is, *prior to all methodologically grounded strict observation and rigorous description is the anticipation and projection of a fundamentally mathematical world-in-itself, that is, an assemblage of bodies in motion calculable in advance which, having already ontologically weighted primary against secondary qualities, takes this world to be the really real...* This projection can be found in the modern science of nature at its origins, in Galileo and reaches all the way forward to its completion in Einstein..¹⁷⁶ The world of nature (including man as natural) that is anticipated is thus homogeneous, flattened out, bodies, events and processes in nature lack qualitative meaning and determination. Nature now appears as an aggregate totality of objects to be analyzed or decomposed, then reconstructed, manipulated and disposed, i.e., the fitting subject of capitalist development in its full sense (i.e., as a raw material basin) only if anticipatorily. *It is only within the framework constituted by this projection (anticipation) that an event in nature can occur as such, i.e., become visible as an event, process or relation.*

The distinctions of primary and secondary qualities, etc., and, more fundamentally, the anticipatory ontological weighing of the former against the latter taken together constitute the scientific projection of the world of nature as object-like (merely the other, ideal side of the reality of societies of capital). Object-likeness is thought, in reductionist and crude materialist terms at least since Descartes, as essentially and simply extension, as contentless, infinitely malleable "matter" subsisting in homogeneous space, devoid of any internal logic, life or subjectivity.

¹⁷⁶See *The Critique of Science*, First Study, Part III, and the Second Study, Part V, both in their entirety.

But "matter" is not "real" at least in the sense modern physical science suggests, but, in fact, is the *product* of scientific analysis and reconstruction. All modern physical theory is analysis, conceptually decomposes its object, natural bodies. *This* is how *understanding* is arrived at. Once achieved, a whole can be reconstructed, this object can be reconstituted from the elemental, itself a construct, on up. For example, scientific understanding of a rock one might wish to quarry is reached only when it is conceptually dissolved into its chemical components, themselves understood in terms of their atomic structures and their interactions. Only then can we say we have understood what this rock is, an ore consisting in so much magnesium, aluminum, iron, etc., components which themselves have such and such atomic structures and are related (bonded) in such and such ways, all of which allows us to "understand" the object (rock), to grasp it in terms of a raw material (iron ore) to be used in commodity production (steel). Thus, scientific understanding is always attained *abstractly, in the movement from a whole to the most elemental*, itself a conceptual construct. *Only then* are these elemental constructs aggregated, a whole reconstructed. That whole is an abstract totality, a conceptual whole that is *in a practical sense* entirely homologous with its elementary, infinitely malleable material components: Precognitively, this understanding penetrates awareness permitting the objects science has constructed to function as ideal, manipulable moments of bourgeois practices in accumulation...

It is here that the *deep penetration of the value-form into the conceptual structure of science* is disclosed, *science with its reductionist method (analysis and decomposition of the object), its atomism (ontological primacy of indivisible, actually infinitely divisible, elementary particles) and its objectivism (nature absent productivity as its motive or its compelling power), and subjectivity as a passively constituted and fully determined element, one element in the aggregate, lawfully governed whole that is nature) is fully homogeneous, perfectly congruent, with capital, with its atomism (the commodity as the fundamental element of the crucial processes, production and circulation, of bourgeois society), its reductionism (human activity rendered abstract, i.e., homogenized, temporally quantified, materialized and objectified as "value," existing solely as an elementary object that, with other such elementary objects collected in production, take the shape of mechanically assembled, socially combined labor-power, as abstract labor) and its objectivism (society as a deterministic system subordinate to laws discovered by political economy, likes those alleged to rule nature): Governed by the anticipatory projection of nature as an assemblage of bodies in motion (itself precognitively motivated by the telos of nature domination), atomism, reductionism and objectivism are spontaneous modes of the bourgeois apprehension of reality, and scientific categories are, or more generally the overarching conceptual architecture of science is, an elaborate, multifarious and multifaceted mediation of this immediacy, effectively freezing it and never transcending it...*

This already presupposes too much: Starting from the real domination of capital over labor, the value-form organizes daily life (i.e., the existential determinants of social life are formed in production), the categories (barbaric common sense) in which reality is immediately apprehended arise in the same daily life, and consequently tacit conceptual models and precategorical expectations of the structure of relations that obtain among events and processes are all ready to hand and, *absent a critical-historical reflection on the genesis and formation of those categories*, form the basis of higher order theorizations: It is *not* that scientific theorizations "reflect" or simply conceptually reproduce in thought the structure of value-form: They do not, but instead are first and foremost one of many qualitatively different forms (among which are the social relations structuring institutions, socially organized play and games, literatures of all sorts etc.), all complexly mediated, in which the order of capital itself finds expression *and* through which it shapes social life in its entirety...

The laws of natural and humanly natural phenomena allow the scientist to generate predictions. It is this very aim which demands extra-theoretical confirmation that, consequently, secures scientific validity. To be sure, if science is to be successful at predicting, it must at the level of concepts capture idealized, albeit *fetishized* aspects of reality itself. Nonetheless, the peculiar and widely recognized validity science as theory has achieved does *not* refer us back to its categorical accomplishments, its "laws" of phenomena, but to experimental verification at the level of scientific activity and to practical verification in the order of society. It is here, then, that confirmation is achieved, "proof" takes the extra-scientific form of socially generalized seeing, approval, and acclaim for the technological achievements based on and exhibited as nature domination: For the validation of those laws demonstrates, whatever else they are, they are also *social prescriptions for the manipulation of infinitely malleable bodies, matter or raw materials, in the waged labor-based production of a world of commodities*. The constitution of such laws is absolutely essential to rationalizing construction of a determinate socio-historical lifeworld, societies of capital. *In the societal validation of prediction, science and capitalism are reunited, the categorical telos of scientific activity (prediction) rejoins the original class (bourgeois), precategorical, and hidden telos of the domination of nature...*

Ideationally produced through scientific method, this mathematized world of natural phenomena is an anticipatory projection of a socio-historical lifeworld constructed through the subjugation of society and surrounding nature to the production of commodities for exchange. The cognitive construct "matter," contentless bodies subsisting in homogeneous space, is the, albeit oblique, theoretical elaboration of "raw material" as it appears in commodity production, endlessly malleable natural objects ripped from decontextualized surrounding, visible nature. Science projects a nature that is flattened out and rendered a surveyable and manipulable object: Stripped of

qualitative determination and reduced to a gross abstraction, it has become an *a priori* quantifiable series of points determined exhaustively by positions given with objective time and extended space. It is an abstraction without purpose or internal logic to its moments (bodies, particles, mass points) and without inherent or defining characteristics apart from those mathematically projected. From the side of demystified daily experience, however, science's nature can be best comprehended as an ideational product masquerading as real. At the hands of (capital's) science, nature, appearing in history at once as its ground and as a product of a development inseparable from its interaction with social development, has become *aesthetically ugly stuff*. It is, in other words, a product of domination, of what science and capital have made of it. This is nature as matter, as raw material for commodity production on a capitalist basis...

Let us point out that the bourgeoisie is the first class in history for which nature has this sense, for which its relation to social groups, strata, or classes it hegemonizes is immediately and directly mediated by nature domination, where a theorization of this relation is not "mythological" or religious, but "rational" in the specifically capitalist sense of economically rational (i.e., calculative, quantitative and instrumental), and for whom this theorization itself has become an issue (as in the "problem" of climate change).

Science is the theorization operative in the ensemble of capitalist "practices" reconstructing nature as well as in accumulation as raw material for capitalist commodity production. Science in this sense is an anticipatory projection of a socio-historical world produced through the subjugation of society and surrounding nature to the production of commodities on the basis of the abstraction of concrete labor in the waged work of capitalist labor processes. It is as science that the conceptual framework for this reduction is constituted, and out of which production of a capitalist world can be undertaken, a world in which science is at home and without which it would be a stranger without a home (hence, theoretically barren), i.e., which constitutes the societal presuppositions of science's full development and without which it would be undevelopable.

Having sketched out the immanent relation of significant aspects to the total conceptual structure of science to the bourgeoisie as a class considered historically, we have fulfilled our second requirement. Here, in concluding, then, we shall make our position clear: The modern science of nature as the *methos* of nature domination is necessary tied to human domination (i.e., to generating and sustaining abstract labor). If a free society (communism) is possible, it will not only start immediately from the abolition of abstract labor, the value-form, capitalist production and classes, this movement will necessity entail the creation of new liberatory practical and theoretical relations to surrounding nature, that is, with respect to the latter theoretical relation, such movement will entail the abolition of the modern science of nature.

"Law" and Tendency in Marx's Analyses

For the capitalist who confronts the objective compulsion to increase production, a necessity grounded in competition amongst antagonistic capitals (and a necessity in another form which proletarians engaged in waged labor as well appear to confront), production *seems* to have a lawlike character. "Lawful" or "lawlike" here has the sense of unchanging, immutable natural law (not positive or statutory law). The necessity that lawlikeness imposes is mystified. The conception is scientific, and it is bourgeois. (It is analysis generated on the basis of abstraction without concretion.) If this concept of law moves within the orbit of science, it also moves within the orbit of capital.

Critical, self-reflexive theoretical analysis on human experience does not generate a concept of law, but one of *tendency*: Rising from social and historical contents, theory develops the category of objective possibility, because although historical development, itself neither fully necessary nor entirely contingent, moves in a singular direction, it is always latent with possibilities.

History itself is at any given moment a field of possibilities, albeit circumscribed, for at least one social groups in, and constitutive of, society. (Abstractly, for the individual, perhaps necessity is at work, and all she can do is tact between unpalatable options.) In action, social groups can break with the course of history, irrupt as it were into it, making one of those possibilities real. We shall return to this latter (in the following section), but let us go back to the concept of law itself.

We can clarify the concept by reconstructing its genesis with respect to bourgeois society.

Referring to the rule of law embodied by a sovereign (whether an individual, an office or an institution such as parliament) and thus detached from moral and political theory (as in Plato, Aristotle or Aquinas) and from the theorizations of ancient Roman jurists (e.g., Gaius) for whom the concept refers to a body of similar forms found in all legal systems, the concept of law is, in fact, bourgeois in origins. It first appears with regularity in Grotius and Pufendorf, and of course Hobbes (never mind that Hobbes' most important work in this regard predated Pufendorf's) where the concept is systematized, though not for itself but as a part of argument for which man, in leaving nature and entering society, subordinates herself to a sovereign.

The concept is taken over in the early development of the modern science of nature, and has the sense grounded in mechanics (as the fundamental science) of the necessity to which all bodies are subject in a universe where bodies are the basic datum. Expressed mathematically, that necessity has the "force of law"... as, for instance, in gravity... which already suggests, tacitly at least, the movement in thought from society to nature and back to society. It is a force or power to which, without exception, all must submit. And, with the first reflections on an emerging political economy, the movement does return to society, but unknowingly, i.e., the early political economists such as William Petty appropriated the term because in mechanics the necessity and universality of "law" expressed perfectly what they thought characterized commodity exchange and the movement of price, and, underlying these phenomenal forms, the social relations in production on which bourgeois power in society rests.

This concept of law is grounded in the belief that the development of society has reached a moment in which its fundamental elements (land, labor, capital), the basis of all social life, have finally appeared and now openly function in structuring society and in the consciousness of men. Bourgeois society thereby is, to deploy a much later characterization, that last society in history. Its analysis (political economy) elucidates the eternally underlying features of human socialization as such; its categories are universally valid. Marx's critique of political economy exposed the falsity of this standpoint - without however achieving self-reflexivity. Exploring this limitation will be our first task.

Not only did the critique of political economy fail to achieve self-reflexivity, it reproduced the same gross error of the bourgeoisie's science of society (political economy) by uncritically elaborated its own categories, assuming their universality validity. The basic framework of this elaboration starts, ontologically, from the concept of labor as the everlasting mediation of human-nature metabolism, which have already carefully examined,¹⁷⁷ and develops historically in the mode of production analysis and a stagist conception of history. Exploring the latter will be our second task.

To his undying credit, toward the end of his life Marx recognized one of the consequences of the underlying confusion of critique with science (without, however, apprehending the fundamental point at which he went awry). Investigating the context in which this recognition was made - his study of the Russian commune, and the very real impediments to undoing the damage already done will shape the direction of our final inquiry in this section.

In sections which immediately follow, we shall embark on criticism of elaborations which aim at revamping Marx's critique of capital in terms of a totalizing analysis of human history and the societies which have appeared in it.

Historicity of the Categories of the Critique of Political Economy

Throughout the distinctive histories of communities and societies that predate capitalism (exclusive of those societies that are implicated in its immediate run up where the following appears nascently), a massive, thingly institution, congealed social relations formed in and through the activity of classes in production, an "economy," has not

¹⁷⁷See *Ontology of Labor, Metaphysics of Physicalism, labor-power and Living Labor*, above.

separated itself out from "society," has not formed an institutionally distinct, reified and societally determinant sphere...

What is the actual historical condition of this separation?

It is twofold: The first is a lengthy historical process of expropriation, the separation of producers from the means and medium of their productive activity (peasants from the soil and their implements, artisans from the tools and instruments they employ in their craft). The second is formed in a novel social relation as these now propertyless men and women confront a buyer, usually a merchant, with nothing but to sell but their creative activity as a capacity to labor (as labor-power). The buyer provides the means and material of labor – as a rule, the same land and implements in the case of the tiller or tools and materials on which to work as in the case of craft labor – and the latter provide their capacity to labor in exchange for a wage.¹⁷⁸

But before we ever came this far...

For archaic communities and precapitalist tributary societies, productive life simply does not possess the independence, solidity and immanence that it does for societies of capital... We refer to those institutions that we take for granted are distinct as such (i.e., in the practice of daily life they form *separate* activity contexts within which we all work and operate, contexts such as our workplace, education and family, each with distinctive norms governing behavior and expectations). Institutional differentiation is a determinant development *not* of the division of labor as such, but follows upon rationalization starting from production (task fragmentation), and is accomplished in a social process that creates partial, distinct and seemingly self-enclosed (i.e., rationalized) spheres on the model of *specifically capitalist* productive processes, i.e., it is the outcome of capital's movement in its ceaseless drive to generate surplus-value.

...There is, of course, one great institutional differentiation of paramount importance inasmuch as it organizes all the rest: This supreme development of a separate, institutional presence is the state...¹⁷⁹

The categories developed in the analysis and critique of political economy can only be elaborated on the basis of a generalized social practice in which capital institutes itself on its own foundations, that is on the basis of the real domination of capital over labor in production.

In emerging and expanding capital creates itself as a movement that appears without agency, or as self-agency without foundation. This movement rests on the abstraction of labor in production. This movement and its moments (commodities, price, profit, as well as the higher order abstractions, stocks, bonds, their markets, etc., mere abstract moments of a social relation appearing as *things*, yet historically constituted real abstractions) form the foundations for the collectively constituted *institutional* abstractions (such as workplaces embodying productive materials, instruments and machinery, business firms, industries, regulatory agencies, etc.), that, taken together, with this movement and its moments, constitute this economy: The economy is the objective institutional context in which capital's personifications, capitalists, function and operate. In reshaping social life in its own image, capital literally creates the economy: It does not immediately appear as the practice of social groups and the social relations that arise on those practices and thereby form it; instead, the economy is reified, appears thingily, as a real movement that shapes what it seemingly encompasses. It is autonomous and self-regulating because it is in an immediate, practical

¹⁷⁸As we have indicated in the foregoing, these are the actual historical premises for formal domination of labor by capital; nothing more: *For the production processes continues just as before*, just as they were conducted before serfs, peasants, craftsmen, etc. lost their proprietorship in land, craft and tools, etc. The buyer of capacity to labor, the employer or capitalist *makes no attempt to reorganize the work processes* (e.g., by housing a large number of workers under the same roof, by assigning partial tasks to each worker in the production of the outcome, the product, a commodity that the employer will take to market with the intent to sell), *nor does he make any effort to deploy novel means of production*, tools, instruments, machines, or even natural substances to accelerate production. Here, surplus-value is extracted absolutely. (Relative surplus-value extraction is, of course, a "function" of inputs to production which, incorporated into it largely as fixed capital and set in motion by abstract labor, increases its productivity.)

¹⁷⁹The modern bourgeois state is unique in its institutional and separate character, its appearance as a "public" force clothed in a sham objectivity that sets it apart from and over and against individuals and society, its alien otherness that masks its reality as an complex network of hardened social relations governed by the class teleology of the bourgeoisie and actually borne by individuals (themselves bourgeois) whose daily activities reproduce it as such.

For precapitalist forms of sociation, where states have formed, separate institutional features of the state do not appear; they are *indistinguishable* from the persons and entourage of the ruler. Even where the ruler's armed force consists in an army, his nascent bureaucracy in priests or tax collectors, this armed force and these minions, though employed in enforcing domination over the rest of the community, are *not institutionally* separable from the ruler but instead form his personal entourage or his household. (This was as true of Louis XIV as it was of the earliest Egyptian pharaohs.) The state itself has yet to constitute a *distinct sphere separate* from the totality of social relations of which it is a part. Only with the rise of a *centralized*, bureaucratized state form *for capital*, it occurs in the bourgeois era, has the state achieved an *objective, separate institutional* existence.

For example, Egypt in the middle of the nineteenth century was as an autonomous province of the Ottoman Empire since 1805, a modern tributary formation. The greatest overlord of Egypt was the Khedive (roughly, Viceroy). Rondo Cameron notes that, in regard to the debt controlled by foreign capital, "The exact amount of the debt, as well as its origin, has always been a moot point owing to the fact that there was no clear distinction between the debts of the Viceroy and those of the government." *France and the Economic Development of Europe, 1800-1914*: 468 n. 30. Here with regard to finances we see the lack of institutional separation between ruler and state, for in his person the Khedive embodied that state.

sense a mystified and objectivistically lived and experienced sphere of society.

The various categories of the critique of political economy presuppose this differentiation, practical elaboration and institutionally separate development, i.e., the emergence of capitalism, the constitution of an "economy" as such. But for much of the prehistory of capitalism (and especially archaic communities) *and for a future free society (communism)*, those various categories, exchange *and* use value, productive forces and relations, abstract labor and capital, and socially necessary labor time, *labor-power*, have no real referent (i.e., these categories are not existential determinants organizing the practice of daily life) precisely because this institutional separation does not and *will not* exist: The categories of the critique of political economy, like the specific institutional differentiations they refer back to, are product of the development of capitalism itself.

Marx does not always recognize this, Engels rarely did, and with a handful of exceptions (or less) none of the epigones following Marx do, largely because the perspective that necessarily must be consciously assumed is that of *critique*. In all cases what has *not* been assimilated is what in Marx at his best is *consciously counterposed to metaphysics: What is justified and valid is confronting the object (capitalist society) in its specificity and working through it. All legitimate analysis is immanent critique. There is no perspective than is relative to nothing else, no Archimedean point outside society (or, for that matter, above politics) from which to elaborate theory or to engage ourselves practically.*

The categories of the critique of political economy refer us back to real determinants that are immanent in the structure and organization of *that* historical totality called capitalism. They are not externally fixed, valid for all place at all times... Productive forces are not determinate for any and all forms of human society. Otherwise, validation and justification for analysis cannot generated, because the realities it refers back to do not exist (i.e., exist only in capitalism)... These categories were originally generated as a theoretical mediation, and remain internally linked to the project, of the revolutionary transcendence of capital with a view to the creation of a free society (communism).

The vast quantities of ink spilt over the historical reality of "feudalism," the "feudal 'mode of production'," the "transition from feudalism to capitalism," etc are *the* case in point.

"Laws" of "motion" of the feudal social formation do not exist. At best, a coherent, critical analysis of feudal society can offer a description of historically constituted, basic features...

Feudal social relations had their geographical heartland in western Europe from the Loire to the Rhine in the period 800-1200, meaning (among other things) feudalism as a social phenomenon disappeared in western Europe roughly 565 years, over a half millennium, before capitalism appeared. Fancy the connection there.

Feudal social relations were characterized by a subject peasantry; widespread use of service tenement (i.e., the fief) instead of wages; supremacy of a social class of specialized warriors; ties of obedience and protection binding men to men, and, which, within the warrior class, assumed a distinctive form called vassalage; and fragmentation of authority leading to disorder. In the West, feudalism was a historical product of a violent dissolution of older social formations based on kingship (in particular, Merovingian Gaul). It was a form of social order which was *neither centrally held together by kinship nor state centralism, but in the absence of these, by ties of personal dependence*. (This is not to say, feudal societies are without a state, often great lords and the territories they hold are statelets in themselves. What it does mean is where a state is present, it cannot consistently and regularly enforce its "prerogatives," especially revenue extraction. The "feudal state" is limited to the royal household with, at very best, a highly limited civil administration. It is largely ceremonial.) These ties constituted the core social relation, one which was in principle personal, binding men to men unconnected with possession of the soil or place of abode. This much said in the West, as elsewhere, feudalism was a rural phenomenon. Feudal social relations bound an oligarchy of warriors (and a caste of priests) to a subject peasantry, an exploitative bond which gave the former rights to land revenues and, inextricably, politico-judicial authority, and the latter protection and defense.

Metaphysical Constructions and Ideology in the Mode of Production Analysis

The Marxist "mode of production" analysis is theoretically incoherent: It attempts to reconstruct all communities and societies, or as its practitioners prefer, social formations (embodying modes of production) in terms of the limitations established by the "level" of development of productive forces in their relationship to the relations of production. Now the concept of a "social formation" embodies genuine insight. The concept of "society" suggests a unity and cohesiveness that is not present in socially divided (i.e., statist) forms of human sociation. Generally speaking, we can say that that mass of anthropological and historical studies of human communities strongly suggests that these communities and societies rest on various forms, or at least more than one form, of productive activity and basic social relations, one of which, if over historical time the social formation exhibits stability, is predominant. Reflection on these study further suggest if the social formation is stable (i.e., is not undergoing disintegration), these forms are interrelated and interconnected, while instability is an expression of contradictory and unintegrated forms (integration, where and when it occurs, being hierarchical), not to mention that contradictory forms of awareness and institutions that rise on the basis of daily productive practices. This much said, we shall deploy the term "society" fully recognizing the limitations of the concept. Now return to the incoherency of the "mode of production" analysis.

The first problem is that a basic principle of historical materialism is the historical specificity of all social phenomena. (Above we stated "all *class divided* societal phenomena." That is correct the formulation: It restricts "mode of production" analysis to statist social formations based on fixed positions in a division of labor. With few exceptions, Marxists naively and idiotically believe that, absent social labor, a sphere of production and an economy, stateless communities can be subject to the same analysis; and they just as naively and idiotically believe that the "pure," i.e., socio-economic, categories of class analysis that appear only as capitalism is established on its own foundations can be found to live in, and are determinant for, the relations and activities of social groups that define non-capitalist social formations.)

Yet the "mode of production" assumes a scheme of human social development that is valid universally, a schema of *lawfully* determined "stages" defining both place and time within which various societies are ranked (by level of development of productive technique): The analysis is ahistorical yet of compelling necessity universalist, for whatever cannot be fitted to it is irrelevant (or silently passed over).¹⁸⁰ It uncritically rests on an ontology of labor which explains all human phenomena, no matter how complexly interconnected, "ultimately" with reference to mastery of nature based on the development, in labor, of technics, technical and technological control of this interaction, "man's" "metabolism with nature" to cite Marx,¹⁸¹ or in another formulation which captures the universalist, uncritical ontology very well, "Technique" is the "premeditated, progressive instrumentalization of the natural world by man."¹⁸² The second problem with historical materialist mode of production analysis is that, as uncritical, it is incapable of validating its own categories: There is no perspective from within this analysis that will permit its practitioners to coherently generate universalist concepts. An analysis that declares for the temporal specificity and mutability of all conceptual productions (that, moreover, finds these productions "reflecting" the "concrete" social phenomena they refer back to) which at the same time cannot articulate and has nothing to say about the evolving historical dynamic that forms a perspective within society from which assertions of this sort can be made, is, simply speaking, really absurd and ludicrous. The argument that is instead put forth is dogmatic and, in our language, an abstract dialectic of concepts, i.e., the structure of community, society or social formation does not arise from social and historical contents but through a conceptual elaboration or, more precisely, it is developed by way of logically explicating conceptual content – not altogether unlike (this is a measured understatement) arguing about how many

¹⁸⁰And when an incongruent institutional reality is too massive to be passed over, it must be integrated. It is in such instances that the vulgar categories (for instance, base and superstructure), being forcefully imposed, are most on exhibit. Here we can cite, for instance, Perry Anderson's discussion of the Roman Church in the long "transition" from late antiquity to feudalism and beyond. See *Passages from Antiquity to Feudalism* (London, 1974), 132-137, where the Church is described as a nascent bearer of a novel affirmation conception of the role of labor in human existence, assisting in releasing feudal society from the "cultural barriers" to technical innovation. It is, of course, *de rigueur* to uphold the conceptual straightjacket that the "mode of production" analysis is. But in point of fact, Anderson, and others like him who indulge in a speculative metaphysics of labor, have it assbackwards:

If we have stressed the centrality of merchants, burghers, in demanding a concept of property that facilitated the alienation of movement and goods, and goods as commodities... in the name of rational procedure they desired precisely that unavailability and inviolability of their title to land, movables and merchants inventory... we would, be remiss if we did not also point out, in a genuine ruse of history, there was an otherwise powerful, but hidden, actor in bringing into being novel, formal legal categories that engaging social practices, an actor who very effectively assisted in securing a political and social framework in which capital itself could freely circulate and its formal domination over labor in production could be tentatively established. It was Roman Catholicism that played a pivotal role in this recovery. It was altogether secondary that the centers of learning were often Church endowed institutions (here see Paul Vinogradoff, *Roman Law in Medieval Europe*. London, 1909: 43-44, for these centers and specific personages involved), or that university faculties engaged in the work of recovery were more often than not philosophers, i.e., theologians. What was truly significant were the Church's leading figures all understood, and engaged its clerical intelligentsia in conceptually producing a theoretical framework that would enhance, rationalize and legitimize overturning, customary notions of possession in favor of unambiguous concept of legal ownership and, with it, a concept of inheritance that would immediately, and unequivocally orient its practice. This, the latter was that absolute and unconditional concept of property, best transmitted by way of primogeniture.

What was at issue for the Church was a clear set of rules that governed the transfer of property... usually land ostensibly (and often) in the form of gifts, for example, in wills... that would preclude challenges to the bestowal from the family and kin. In this respect, it only need be recalled that, the Gregorian reforms notwithstanding (and here we call bluntly state they were every bit as much an obfuscatory mask as an expression of a spiritual renovation), the Church was the greatest landowner in large parts of western Europe and the Mediterranean, especially on the Italian Peninsula. Here, as elsewhere, the Church made every effort, to use Bloch's terms (*Ibid*, I, 208, 209-210) to breakdown "old customary and seigniorial impediments" that stood in the way of "individual possession."

¹⁸¹*Das Kapital*. I, 5.1: 167.

Der Arbeitsproceß... ist zweckmäßige Tätigkeit zur Herstellung von Gebrauchswerten... allgemeine Bedingung des Stoffwechsels zwischen Mensch und Natur, ewige Naturbedingung des menschlichen Lebens und daher unabhängig von jeder Form dieses Lebens, vielmehr allen seinen Gesellschaftsformen gleich gemeinsam." ("The labor process... is purposeful activity aiming at the production of use values... [It is the] universal condition of the metabolic interaction between man and nature, the endless nature-imposed requirement of human life, and it is therefore independent of every form of this life, or rather it is common to all forms of human society.")

This is hypostatization of statist social formation as the categories specific to the critical analysis of capitalism. Thus, "labor process" and "use values." It cannot be sustained in the light of anthropological study. Here, above all, see Pierre Clastres, *Society against the State* (New York, 1978)

¹⁸²*Passages from Antiquity to Feudalism*, 28.

angels can sit atop the head of a pin. While any number of otherwise antagonist Marxist tendencies (many ostensibly revolutionary, e.g., left communists) share this historical framework, most do not make it explicit. The task instead falls to fire-breathing terrors of the academic world comfortably ensconced in the bourgeois chairs and seeking nothing more than an accelerated technological rationalization of capitalism.¹⁸³

The Marxist "mode of production" analysis, reconstructing all social formations in terms of a dialectic of forces and relations of production (which by definition is the "mode of production") and constituting reconstructed social formations in terms of coexisting dominate and subordinate modes, is, then, wildly at variance with a basic principle of historical materialism; namely, the historical specificity of all class divided societal phenomena.

Thus, (a) it is metaphysical. It is metaphysical, first, because it violates the historical specificity of all social phenomena in class divided societies, a fundamental principle of Marxism no less. Its rests on an ontology of labor which, analytically, functioned as an integrated set of operative assumptions in the examination of capitalism as a social formation in its historical specificity, but which claims validity across all communities, societies and social formations in history; (b) it is metaphysical because it asserts claims that cannot be validated, "falsified" or "verified" in the evidential sense; it assumes a standpoint beyond history, making claims for any number of communities or societies independently of any and all possible subjectivities achievable from within those social orders. Thus, if explicit in the interests of "lawfulness," the "mode of production" analysis reduces, e.g., feudal, society to the same broad categorical structure uncovered in the critique of political economy, that is of capitalism, i.e., final determination by the dialectic of forces and relations of production, classes understood socio-economically in terms of their relation to production processes, etc.; (c) so it is metaphysical character because all social formation are understood as progressively unfolding stages in the development of humanity, a progression measured at bottom in terms of the cumulative labor "savings" achieved in expansion and growing technical sophistication of the productive forces;¹⁸⁴ (d) it is further metaphysical in character of the analysis in that the "mode of production" analysis, then, is teleological, and thus metaphysical all over for a fourth time: Undertaken from the perspective of capitalism, it conceives the terminus of history in communism. This *telos*, this end (of prehistory no doubt), is only possible as the outcome of the overthrown of capitalist social relations of production that leave the transhistorically formed, objectified and materialized productive forces unchanged, now to be unleashed and to blossom.¹⁸⁵

Second, in transposing categories of the analyses of a specific historical formation (capitalist society) out of the historical context in which they were generated (i.e., in freezing and ontologizing them), the "mode of production" analysis ignores the specific and, or, unique features of the social formation under consideration, i.e., skips over and never grasps that which makes the formation that which it is. Instead, this analysis reduces the meaning of symbols, events, relations and things for agents (groups or individuals) to what can be assimilated to a preconstituted dialectic of forces and relations of production, subsuming it under one of the necessary stages in the development of productive forces. The question of whether the societal totality so reduced is amendable to such an analysis never occurs, having been precluded in principle by those fundamental operative assumptions.

Third, the ontology of labor, or the centrality and decisiveness of labor for the constitution of the totality of human existence, operative in the "mode of production" analysis, fails to comprehends that the centrality of labor is specific to capitalism for which labor is temporalized, quantified, homogenized, objectified and materialized, i.e., is abstract labor, and which as such is decisive for the constitution of bourgeois society. In other words, the centrality of labor for the constitution of "society" is conditional upon the reduction of all human relations to the one-dimensional social relations of capitalist production, thus, to the reifying generalization of abstract labor so constituted in the work processes of capitalist production.

This reduction is a socio-historically formed condition, as is the social order from which it is analytically extracted as a lawful "model" for the analysis of "social formations." But the actual historical condition of the very possibility of this reduction depends upon the separation out of an "economy" from the other as yet undifferentiated spheres of social life (and their constitution as separate spheres), and its formation as an autonomous regulator of the totality of that life, i.e., upon the constitution of a system of social relations founded upon and continuously reproducing abstract labor, i.e., this reduction has as its condition the constitution of capitalist society.

¹⁸³Exemplary in this regard are Louis Althusser (*For Marx, Reading Capital* with others), Nicos Poulantzas (*Political Power and Social Classes*) and, of course, Perry Anderson (*Passages from Antiquity to Feudalism, Lineages of the Absolutist State*), and below them the entire structuralist school.

¹⁸⁴Thus, for example, the Florentine commune and republic must necessarily subsist not only as an urban enclave on the edges of, but as a fully compatible part of, the feudal social formation.

¹⁸⁵Communism is essentially reduced to technologically manufactured, commodified abundance; it is elaborated as a plan formulated by a centralized bureaucracy at the helm of which stand a layer of radicalized, bourgeois intellectuals, revolutionaries so-called; so unleashed, its productive forces accelerate their development through the same capitalist inputs that define real domination, bourgeois science aimed at nature domination and technologies of capital through which this "mastery" is achieved. Thus, this communism is a statist monstrosity that reproduces a scientific civilization that is quintessentially bourgeois, i.e., as a highly rationalized capitalism resting on abstract labor and the value form.

Belated Recognition

The "Leap Over" Capitalist in the Periphery of the World System of Social Relations

Marx could never quite get beyond and dispense with the obfuscatory categorial framework of historical development, say, as he set it down in the *Preface to A Contribution to the Critique of Political Economy*.¹⁸⁶

This is clearly visible in that reputed emancipatory analysis of capital, the *Grundrisse*, even, nay especially, where the entire *stagist metaphysics* of historical development breaks down. Since the "Asiatic 'mode of production'" persists and resists capitalist penetration, Marx is left with feeble reasons why it refuses its assigned place as a stage. He speak of the Asiatic as the "most tenacious" form, saying it has "held on for the longest time,"¹⁸⁷ and indicates that trade, the increasing circulation of money it entails and thus the growing dependency on sale and not immediate use "scarcely shook the old Indian communities and Asiatic relations generally"¹⁸⁸ as these "little communities independently vegetated alongside one another."¹⁸⁹

This tenacity lay fundamentally in the "combination" or "unity" of "manufactures and agriculture" within the village community, which rendered it self-sustaining, permitting it to form within itself "all the conditions of reproduction and surplus production."¹⁹⁰

In point of fact, however, it was not this presumed unity in either of the other two major forms of human sociation, archaic communities and (the two historically significant shapes of) tributary formations, ancient and modern, that blocked capitalist penetration.

Since it was not archaic communities Marx was concerned with (and since we have treated of them extensively elsewhere),¹⁹¹ and while in the *Grundrisse* Marx deals with ancient forms,¹⁹² we shall confine ourselves to a modern

¹⁸⁶„Daher stellt sich die Menschheit immer nur Aufgaben, die sie lösen kann, denn genauer betrachtet wird sich stets finden, daß die Aufgabe selbst nur entspringt, wo die materiellen Bedingungen ihrer Lösung schon vorhanden oder wenigstens im Prozeß ihres Werdens begriffen sind. In großen Umrissen können asiatische, antike, feudale und modern bürgerliche Produktionsweisen als progressive Epochen der ökonomischen Gesellschaftsformation bezeichnet werden. Die bürgerlichen Produktionsverhältnisse sind die letzte antagonistische Form des gesellschaftlichen Produktionsprozesses, antagonistisch nicht im Sinn von individuellem Antagonismus, sondern eines aus den gesellschaftlichen Lebensbedingungen der Individuen hervorwachsenden Antagonismus, aber die im Schoß der bürgerlichen Gesellschaft sich entwickelnden Produktivkräfte schaffen zugleich die materiellen Bedingungen zur Lösung dieses Antagonismus. Mit dieser Gesellschaftsformation schließt daher die Vorgeschichte der menschlichen Gesellschaft ab.“ (“Mankind thus always sets itself only such tasks as it is able to solve, since more carefully considered it is always found that a problem itself arises only when the material conditions for its solution are already given or at least tacit as it, the problem, forms. In broad outline, the Asiatic, ancient, feudal and modern bourgeois modes of production can be designated as progressive epochs in the economic development of society. Bourgeois productive relations are the last antagonistic form of the productive processes of society, antagonistic not in the sense of individual antagonism but in the sense of the conditions of social life out of which individual antagonisms grow; for productive forces gestating in the womb of bourgeois society themselves create the material conditions to solve this antagonism. The prehistory of human society thus concludes with this social formation.”) *„Zur Kritik der politische Ökonomie“* (1859), „Vorwort.“ *MEGA II/2 Ökonomische Manuskripte, 1858-1861: 101.*

¹⁸⁷„Am zähsten und längsten hält sich notwendig die asiatische Form.“ Marx, „Formen, die der kapitalistischen Produktion vorhergehen.“ *MEGA II/1. Ökonomische Manuskripte, 1857/58 (Grundrisse)*, Teil 2: 391.

¹⁸⁸...„hat [er] die altindischen Gemeinwesen und überhaupt asiatischen Verhältnisse kaum erschüttert.“ *Ibid*, „Vermischtes.“ 721.

¹⁸⁹...„die kelinlein Gemeindn unabhängig neben einander vegetieren.“ *Ibid*, „Formen...“ 380.

¹⁹⁰„Mitten im orientalischen Depotismus und er Eigentumslosigkeit, die juristisch in ihm zu existieren scheint, existiert daher in der Tat als Grundlage dieses Stamm- oder Gemeindeeigentum, erzeugt meist durch eine Kombination von Manufaktur und Agrikultur innerhalb der kleinen Gemeinde, die so durch self-sustaining [sic] wird und alle Bedingungen der Reproduktion und Mehrproduktion in sich selbst enthält.“ *Ibid*, „Formen...“

This tenacity "liegt dieß in ihrer Voraussetzung: daß der einzelne nicht der Gemeinde gegenüber selbständig wird; daß self-sustaining [sic] Kreis der Produktion, Einheit von Agrikultur und Handmanufaktur..." *Ibid*, „Formen...“ 391.

So that, Marx indicates, slavery and serfdom are solvents of the form of property resting on the clan system, modifying all of its forms. But these relations of laborer to master, "Am wenigsten können sie dies in der asiatischen Form. In der self-sustaining [sic] Einheit von Manufaktur und Agrikultur, worauf diese Form beruht..." *Ibid*, „Formen...“ 397.

¹⁹¹*Archaic Communities and the Origins of Agriculture*, in particular the section entitled "Non-Capitalist, Human Communities (Forms of Sociation) and Earthly Nature."

¹⁹²Even here he was mistaken.

According to Marx, economic development, expansion of productive forces, the possibility of the emergence of capitalism in China and India, were, as already indicated, blocked by the unity of handicraft and agriculture centered in the village. This is a retrospective projection. In an institutional sense, such movement was impeded by the peculiar structure of local self-sufficient economies that dotted the landscape of at least ancient China.

This structure was, at least in ancient Chinese history and society, constituted contrary to Marx by a walled city and its tributary rural areas. (Owen Lattimore, *Inner Asian Frontiers of China*. Boston, 1951: 393-394, 423, 471, 537). At the center of this unitary or "cellular" phenomenon was the fortified (or walled) city, a nuclear site housing the granaries that stored the tribute, surplus grain, extracted from the surrounding village communities. The "walled city-in-the-country" was an administrative center organized and controlled by the institution of kingship (i.e., by a king, his household and immediate entourage, and, above all, by his armed force), and, later in dynastic history (beginning with the period of the Early Empire, beginning with the Former Han) with an institutionally formed bureaucracy schooled in Confucianism, which, in every ensuing era (the Middle and Late Empires) of dynastic history, constituted, if you will, the infrastructure of the Chinese ruling class; it was also here, in the political-administrative city, that artisan production (tools, cloth, utensils) for limited trade with the villages took place (*Ibid*, 394), from here the armies were fed, and from here

tributary formation, in particular to specifically one (Tsarist Russia) which was what interested Marx in the drafting his response to Vera Zasulich.

Now Marx did not recognize Tsarist Russia as a tributary formation, in his language Asiatic, for no doubt the obvious reason that in its modern form it did not fit into the schema, having been surpassed by ancient and feudal forms of human sociation. And, while the passages appended as footnotes to the foregoing pointedly exhibit the nonlinear character of the schema (this is the most minimal construction that can be put on it, in fact they explode it), Marx never confronted the aporia these passages openly suggested. He was simply and unshakably convinced otherwise. We suspect because the growth of a separate technology (technologies of capital and capitalist technology) as inputs into bourgeois production, once become systematic, permitted the capitalist economy to appear, and appear to him, expansive through its *cycle of boom and bust* and made for endless productivity growth, both of which on productivist assumptions made it appear "progressive." These are objectivistic characterizations, as Marx non-knowingly understood, so that, for instance, it is abstract labor mediated by this technological apparatus it sets in motion that is so enormously productive; but it clear that all the various forms of human sociation that have appeared historically in one manner or other (i.e., either directly or mediately having been superceded by later forms) dissolve in capitalism, and from here it is cognitively facile to see this history as a development that can be apprehended unilinearly.

The draft response to Zasulich, and the Preface to 1882 Russian edition of *Capital* as well, are noteworthy for the absence of a direct confrontation with the issue of a unilinear stagist history of broad social forms.

This is unfortunate: Plekhanov first and foremost,¹⁹³ and the generations of Russian social democrats that followed him, established their Marxism on the basis of 18th century materialism and the 19th century philosophy of history tied to it, i.e., on the basis of the historical necessity of stages of development. The issue was important because once the theoretical confrontation between Marxists and populists was set aside, i.e., after the visible and undeniable emergence (beginning in 1894) of the textile proletariat as a social force in Russia, and the question of leadership of the revolutionary movement decided, i.e., after proletariat's visible revolutionary potential decided it in favor of the Marxists, the views of the social democratic layer of disaffected bourgeois intellectuals inside this movement became hegemonic. That included the "materialist philosophy of history" or, as we prefer, the stagist metaphysics of historical development.

This is ironic: For Vera Zasulich had in her possession a letter from Marx in which, to his everlasting credit, he finally relativized the claims made on behalf of that metaphysics, effectively abandoning it: He offers her a gloss on his own work (*Capital*, I), which reads: "The 'historical inevitability' of this movement is thus expressly limited to *western European countries*."¹⁹⁴ (our emphasis). In Zasulich's hand, however, the gloss *passes over, however, into oblivion, effectively obfuscating it, rendering ideological*: Zasulich was not a revolutionary populist. She, George Plekhanov and Paul Axelrod constituted the leadership of the first generation of Russian social democrats. Three years (1884)

corvée labor was mobilized (particularly for irrigation projects, e.g., from very early on roads, ditches and later canal digging and maintenance, embankment construction, etc.).

It is an egregious error (one we, like Marx, made in the past) to think the Chinese history was characterized by "stagnation." (In Marx's case, the view itself was more than a residue of a "progressive-dialectical" and stagist view of historical "development.") Two eras in particular, that of the Warring States (Zhan Guo), 475-221 bce, and the early Song, circa 975-1100 ce, were periods of economic dynamism, enormous productive "development" and flourishing urban culture, the former one of the two summits of civilization comparable in respect to material and cultural achievement to ancient Greece from the time of Pericles' ascendancy to the death of Epicurus (i.e., 460-270 bce), the other at its moment of supremacy constituting the world's most advanced civilizational coordinates.* For instance, as Mark Elvin notes before 1100 ce the capital city of Kaifeng had a trade estimated at full 50% greater than that of London in 1711 ce. (For the Warring States, Cho-yun Hsu, *China in Transition: An Analysis of Social Mobility, 722-222 BC*. Stanford, 1965: 107-149; and for the Song, Mark Elvin, *The Pattern of the Chinese Past*. Stanford, 1973: 114-199, respectively. Elvin, *ibid*, grasps this situation in terms of a long preparatory period, one reaching back 300 years, in which technique improvements in wet-rice cultivation, advances in water transport, the increasing availability of copper for coin, burgeoning commerce into which outlying rural agricultural areas were increasingly integrated, and rapid technological progress especially in "industry," e.g., iron production taken together formed the basis for this civilization, though one need not... we certainly don't... accept Elvin's objectivistic-deterministic framework, *ibid*, 20, 110, governing his analysis).

¹⁹³If the populists thought full capitalist development in Russia could be avoided, beginning with George Plekhanov social democrats argued otherwise. What the social democratic position as articulated by Plekhanov reduced to, though, was an assertion of the historical necessity of the development of capitalism in Russia. Decried by the laws of historical development, i.e., deduced from the scheme of a crudely materialist (or, if you prefer, 18th century Enlightenment-driven) philosophy of history, no amount of lamentation could change this unfolding reality. With capitalism would come a proletariat, and it alone would form the historical agency of the transcendence of this mode of production. (Well, maybe. Mystifyingly masked by Marxian attention to the working class, there was the hidden subject, the socialist intelligentsia so-called according to Lenin's 1902 manifesto, *What is to be Done?*, real agency because it brought "consciousness" to the proletariat "from the outside" while hegemonizing the workers' movement.)

¹⁹⁴Die "historische Unvermeidlichkeit" dieser Bewegung ist also ausdrücklich auf die Länder Westeuropas beschränkt." Marx an Vera Iwanowna Sassulitsch [Zasulich], 8. März 1881. *Marx-Engels Werke*, Bd. 19: 242.

* In almost all ways, the level of economic development of "eleventh century China" was "not achieved by any European state until the eighteenth century at the earliest." Charles Hucker, *China's Imperial Past: An Introduction to Chinese History and Culture*. London, 1975, 342.

after receipt of the letter from Marx, the troika formed "Emancipation of Labor."¹⁹⁵ (This was the first Russian *Marxist* group, and it set the tone for those that followed. It was founded in Geneva, revolved around the three and consisted exclusively of exiled intellectuals.) Thus, within the social democratic circles, Zasulich (and likely Plekhanov) suppressed knowledge of Marx's judgment on the universality of the categories of the critical analysis of capital in favor of the "materialist philosophy of history" because the former was inconsistent with the aim of hegemonizing the emerging Russian workers' movement and politically entailed a rapprochement with revolutionary elements among the populists.¹⁹⁶

We stated Marx's remarks constituted a *gloss*. The passage on which Marx based these remarks... he cited it to her... was taken from the first French edition (1872), for the letter to Zasulich itself was written in French. Now the German version of this appears in Volume 19 of the *Marx-Engels Werke*, which Dietz Verlag published in 1962.¹⁹⁷ It reads: „Dem kapitalistischen System liegt also die radikale Trennung des Produzenten von den Produktionsmitteln zugrunde... Die Grundlage dieser ganzen Entwicklung ist die *Expropriation der Ackerbauern*. Sie ist auf radikale Weise erst in England durchgeführt... Aber *alle anderen Länder Westeuropas* durchlaufen die gleiche Bewegung.“ (Marx references page 315 in the French edition. Our emphases.)¹⁹⁸ We render this, thusly: "The capitalist system is based on the radical separation of producers from the means of production... The foundation of the entire development is the expropriation of the peasantry. The radical way is first pursued to its logical conclusion in England... But all other countries of western Europe traverse the same movement." The gloss is obviously legitimate, in fact perhaps best captures the limitation that is intended, or at least as Marx intended following his study of "original sources" (*Originalquellen*). Curiously, though, substantially the same and thus faithful to the original (1867) German edition,¹⁹⁹ the now standard English translation has a significantly different wording and sense: "The capital-relation presupposes a complete separation between the workers and the ownership of the conditions for the realization of their labor... The expropriation of the agricultural producer, of the peasant, from the soil is the basis of the whole process." So far, so good. "The history of this expropriation assumes different aspects in different countries... Only in England, which we therefore take as our example, has it the classic form."²⁰⁰ Reproduced in the latest English language edition, what is missing in Marx's citation to Zasulich (following the second ellipse), and it is missing in the 1962 Dietz edition of the text, is this: "and runs through its various phases in different orders of succession and in different historical epochs."²⁰¹

Thus, what the passage that Marx skips reveals is precisely a soft version of the stagist metaphysics, for though in "different countries" the same rigid developmental history may not be followed, though its "various phases" are, thus completing the "succession." The letter to Zasulich says otherwise. Thus the gloss.

And that is what is important: When confronted with those original sources, he relativized the schema. In this sense, the finished letter went far beyond the draft, a position which inverts the usual assessment:²⁰² "In *Capital*, the analysis presented thus contains no evidence at all, neither for nor against the capacity for social life of the village community. The special study which I am, however, pursuing and for which I have obtained material from original sources has, though, convinced me that this village community is the fulcrum of the social *rebirth of Russia*..."²⁰³ (our emphasis), *i.e., of the transcendence of the capitalist mode of production*. In a preface to *The Communist Manifesto* published late in Marx's life, he and Engels state a similar position in this respect, namely, that Russian might not be compelled to go through those "various phases" but instead: "If the Russian Revolution becomes the signal for a proletarian revolution in the West, so that both complement each other, existing Russian communal property in land may serve as the starting point for a communist development."²⁰⁴

¹⁹⁵See George Plekhanov, "Program of the Social-Democratic Emancipation of Labor Group" (1884), in *Selected Works*, I. Moscow, n.d.: 402.

¹⁹⁶Trotsky notes that as late as March 1917, Plekhanov and Zasulich formed the core of the extreme rightwing within the Menshevik organization. *History of the Russian Revolution* (3 vols.), I. London, 1967 (1930): 220.

¹⁹⁷The original Russian publication appeared in *Arkhiv K. Marks'a I F. Engels'a*, Vol. 1. Moscow, 1924, which was followed by the first German edition of the draft – there are three – in *Marx-Engels Archiv*, Vol 1. Frankfurt, 1925.

¹⁹⁸« Au fond du système capitaliste il y a donc la séparation radicale du producteur d'avec le moyens de production... Mais la base de toute cette évolution, c'est l'expropriation des cultivateurs... Elle ne s'est encore accomplie d'une manière radical qu'en Angleterre... Mais tous les autres pays de l'Europe occidentale parcourent le même mouvement... » *MEGA II/7 Le Capital*, I, 26: 632, 634.

¹⁹⁹Ihre Geschichte nimmt in verschiedenen Ländern verschiedene Färbung an und durchläuft die verschiedenen Phasen in verschiedener Reihenfolge und in verschiedenen Geschichtsepochen. Nur in England, das wir daher als Beispiel nehmen, besitzt sie klassische Form." *Capital*, I, 24.1: 644.

²⁰⁰Karl Marx, *Capital: A Critique of Political Economy, I: The Process of Capitalist Production*. London, 1976: 874, 876.

²⁰¹*Ibid.* 876.

²⁰²Teodor Shanin, *Late Marx and the Russian Road*. New York, 1983: *passim*.

²⁰³Die im "Kapital" gegebene Analyse enthält also keinerlei Beweise - weder für noch gegen die Lebensfähigkeit der Dorfgemeinde, aber das Spezialstudium, das ich darüber getrieben und wofür ich mir Material aus Originalquellen beschafft habe, hat mich davon überzeugt, daß diese Dorfgemeinde der Stützpunkt der sozialen Wiedergeburt Rußlands ist..." Marx an Vera Iwanowna Sassulitsch [Zasulich], *Ibid.* 242-143.

²⁰⁴"Wird die russische Revolution das Signal einer proletarischen Revolution im Westen, so dass beide einander ergänzen, so kann das jetzige russische Gemeineigentum am Boden zum Ausgangspunkt einer kommunistischen Entwicklung dienen." *Manifest der*

Belated recognition, but recognition nonetheless.

The "Law" of Value and Accumulation of Capital

Summary Analysis (Volume 1, Chapter 23)

At this point in his analysis, Marx offers a statement of several general conclusions he draws in ideally reproducing the movement of capital, if largely understood to this moment only in terms of "simple reproduction."

Even if here he had not introduced the so-called "law" of value, we shall begin with it.

Bearing in mind the distinction between "law" and tendency we brought forth and presented at the outset of the previous section, and emphatically underlining that any and all "laws" Marx's speaks of operate on the assumption of *competition among antagonist capitals*,²⁰⁵ the following can be remarked:

Mitigating circumstances and conditions notwithstanding (e.g., a period of rapid capitalist expansion in which capitalists in any number of economic sectors are operating at or near capacity and, phenomenally speaking, look forward to hefty profits, feeling confident of an adequate return on investments), mediated under such conditions and forcibly as profit margins come under increasing pressure, capitalists act to ensure the *least* socially necessary labor-time is embodied in the commodities they produce. This is the objectively necessary pressure, no matter how mediated, that emanates from competition among capitals.

Expressed in behavior, this "law" shapes the tendential direction of capitalist development, shapes activity and production under capitalism.

We, though, understand the "law" of value in the broadest sense of the term's usage, namely, there is in capitalism a tendential reduction of social relations to productive ones, that is, there is a disciplining and regimentation of former by the latter implied in the regulation of production of commodities and the renewal and augmentation of capital by socially necessary labor time.

Turn now to Marx's statement of several general conclusions which guide his further investigation.

Marx tells us the absolute law (*absolute Gesetz*) of the capitalist mode of production is making profits, that is, the production of surplus-value.²⁰⁶

He adduces a second "law," the growth, the ongoing expansion, of the means of production relative to the labor incorporated into them expresses the labor's growing productivity, the lever (*Hebel*) of greatest import in accumulation. This means there is a decrease, a diminution, in the mass of labor relative to the increasing mass of means of production that labor or labor's productivity sets in motion.²⁰⁷ Expressed "lawfully," there is a progressive growth of constant capital relative to variable capital.

There are several consequences, or "corollaries" (our term, though we do not it would be inconsistent with Marx), which follow from this "law."

First, constant capital is directly proportional to the progress of accumulation (*Fortschritt der Akkumulation*), while variable capital is inversely proportional to the progress of accumulation.²⁰⁸

Second, as labor's productivity increases, the extent (*Umfang*) of means of production used up by labor also increases while the value of those means relative to that extent diminishes.²⁰⁹

²⁰⁵Monopoly is often visible in local situations in which a very large capital operating with vast financial resources and possessed of economies of scale dominates local markets, setting prices which small capitals have great difficulty in matching or besting. Of course, the aggregate whole of local markets makes up a regional or national market, thus giving monopoly a large presence in the thinking of those who reflect on these matters.

But in point of fact, competition remains decisive even if it only operates globally. In autos, for instance, in a large metropolitan or regional market, various Ford dealerships may price a given vehicle in ways that appeared unrelated to costs of production, and they may compete with GM dealerships whose pricing of a similar (niche) vehicle too is not significantly different, exhibiting monopolistic control and pricing. But internationally the difference between a German Mercedes 300 series sedan, a Ford Fusion equipped with a turbo charger and an Infiniti (Nissan) Q50, each an all-wheel drive vehicle and each in the same market niche, will exhibit pricing constrained by competition, with costs of production, performance and accoutrements accounting for subtle differences in that pricing.

The entire problematic goes back in our view to Lenin, and one respect to Hilferding. Lenin (and all those who have followed him, and those who continue to do so) referred to the dominance of finance over industry in the organization of capitals as a "stage" in the historical of capitalism calling it "monopoly capitalism" or "state money capitalism." (Here see in particular, "The Impending Catastrophe and How to Combat it." *Collected Works*, Vol. XXV, Translated from the 4th Russian edition, *Sochineniia*, 1941-1950, Moscow, 1960-1970: 362-363 in particular.) Even an otherwise acute analyst, David Harvey, employs the concepts with some regularity. See *A Companion to Marx's Capital*, Vol. 2. London, 2013: passim.

Starting from Hilferding, we shall return to Lenin and the concept of monopoly deriving from "finance" capital's dominance over industrial ones in our discussion of the third volume (*Das Kapital*, III). See "The Historical Shift from Production Investment to Speculate Finance," below.

²⁰⁶*Das Kapital*, I, 23.1: 555.

²⁰⁷*Ibid.*, I, 23.2: 558.

²⁰⁸*Ibid.*, 558-559.

²⁰⁹*Ibid.*, 559.

Third, the continual transformation of surplus-value into capital now takes the shape of the growing magnitude of capital entering the process of production.²¹⁰

Fourth, as the growing extent of wealth functions as capital, accumulation increases that wealth in the hands of individual capitalists; thus, it expands the basis of production and broadens the expanse over which specifically capitalist methods of production are deployed.²¹¹

...Here in mentioning the role of the division of property among capitalist families in the emergence of new capitals, Marx uses a common phrase, *alle andren Umstände als gleichbleibend vorausgesetzt*, "all other circumstances remaining the same" (an English language vernacular variant being, "all things being equal"), which in different forms appears in his discussions of various "laws." It is a hedge, a sidestep, an evasion (since in history there are no "laws" in the allegedly "scientific" sense).²¹² For on occasions (and not just on occasion), "other circumstances" do *not* remain the same: It is, in other words, necessary to add qualifications which mitigate the impact of the "law," i.e., dilute its significance as a "law," rendering what is "lawlike," that is unavoidable, *fixed and permanent*, all in all exhibiting the wrongheadedness of a conceptual framework which employs the category in the first place. Later on,²¹³ in formulating the absolute, general law of capitalist accumulation (*das absolute, allgemeine Gesetz der kapitalistischen Akkumulation*), the inverse relation of progress in accumulation fueling demographic growth of a reserve industrial army to the increasing immiseration of the same, Marx expressly sanctifies and normalizes a non-dialectical contradiction, an absurdity, by creating in a single statement a bastard hybridization of "law" in the otherwise bourgeois sense he intends: "Like all other laws, it is modified in its working by many circumstances..."²¹⁴

(The historical present as it becomes the immediate future is the outcome of a field of possibles themselves circumscribed by an entire past development as it, that field, is confronted by the futurity of intent of a social group consciously or no struggling against another group(s), above all the basic groups in society. Contingent on social, organizational and institutional *power*, the consciousness of the actors and the level of combativity of those groups, *that struggle determines the tendential direction* of social development. The role of *critique* is enhancing the self-elaboration of consciousness by exhibiting the maximum toward which the struggle could develop, illuminating its emancipatory possibilities. It is not the study of "laws," even the non-existent "laws" of social development.)

The confusion between "law" and tendency explodes, here we can anticipate, in the third volume, *Das Kapital, III*, specifically Part III entitled *Gesetz des tendenziellen Falls der Profitrate*, "Law of the Tendency of the Rate of Profit to Fall." Marx devotes an entire chapter (14) to a discussion of various "counteracting influences" (actually "counteracting causes" *Entgegenwirkende Ursachen*, but then "cause" strengthens the sense of "law" whereas the intent is to weaken it) including the increasing intensity of exploitation, depressing wages below worker reproductive costs, relative overpopulation, mitigation by foreign trade, and increase of capital stock.

Stemming from his boundless admiration for the "conquest" of nature embodied in the technological prowess of machinery and industry (recall Marx's esteem of Darwin and appreciation of *The Origins of Species*), it is the commitment to the modern science of nature, *to bourgeois theory*, which generates this confusion and creates contradiction (not dialectical ones) in his theory, and paves the way for the reformist appropriation of it.

...Marx now distinguishes the concentration of capital from its centralization. The former merely signifies capital's reproduction on an expanded scale (*die Reproduktion auf erweiterter Stufenleiter*), effectively its accumulation;²¹⁵ the

²¹⁰*Ibid.*, 560.

²¹¹*Ibid.*, 560-561

²¹²These remarks constitute a *necessary polemical digression*, so we have confined them to a footnote.

In the scientific sense, there are *not* "laws" in nature either.* Setting aside a contemplative theory for which humans are outside nature (as in the experiment),** consider, for example, the philosophically absurd theory of origins of the universe, the "Big Bang": What laws "apply" to a universe erupts into being, which expands - from what? a point-mass, nothing? - in infinitesimal time (micro seconds, nanoseconds, whatever)? What evidence is adduced from such a "theory" (of something, everything actually, from nothing)? The presence of "cold" and "hot" spots, temperature fluctuations, in the cosmic microwave background radiation alleged to have been left over from the "Big Bang"? If this constitutes "confirmation," "validation," there are other more coherent explanations, for instance, starting from a nature which has no beginning, is atemporal becoming. (Here see, e.g., *The Materialist Dialectic*, Part V, "The Constitution of Spirit within Nature.")

²¹³*Das Kapital*, I, 23.4: 579.

²¹⁴"Es wird gleich allen andren Gesetzen in seiner Verwirklichung durch mannigfache Umstände modifiziert..." *Ibid.*

²¹⁵*Ibid.*, I, 23.1: 550; and 23.2: 561, 562.

* *The Critique of Science*, Third Study, Note: (*The Relation of "Laws" of Nature and Society to Consciousness*).

** For the contemplative viewpoint of science and the bourgeoisie, the object of analysis only appears within an artificially constructed context (the laboratory is exemplary) in order to view it in its externality, analyze it in its unperturbed form; observe, undisturbed and without interference (i.e., the subjectivity of the scientist qua observer magically disappears), wherein the "experiment" validates (or "falsifies") its laws, laws that permit the object, society and nature, to be decomposed, the living social "components" of the former to be exploited in the accumulation of capital and nature to be transformed into a sink of uglified, unprocessed matter for further used as raw materials in capitalist production. See *The Critique of Science*, Third Study, Part IV, "The Critique of Historicism."

latter refers us to the amassing of capital in a single hand, firm or corporation by way of the [crisis-based] shakeout or expropriation and ruination of many smaller capitals.²¹⁶

These categories (concentration and centralization) rises from three observations.

First, conflicts between competing capitals in the domains of production and exchange are fought by reducing socially necessary labor-time embodied in those commodities. (Marx more prosaically says by cheapening them). All things being equal, the cheapening of commodities is contingent on the productivity of labor, and this in turn on the scale of production.²¹⁷ The upshot is the larger capitals swallow the smaller ones.

Second, the progress of centralization does not depend in any manner on the growth in the magnitude of capital.²¹⁸

Third, capital does not wait on its concentration: Centralization not only increases and quickens the effects of accumulation, at the same time it enlarges and accelerates revolutionization of the technical composition of capital, i.e., its increases constant capital used up in production reducing the relative demand for labor.²¹⁹

Enunciation the tendency of reduction in the relative demand for labor as the mass of constant capital rises permits Marx to seamlessly turn to the variable component in the organic composition of capital, or more adequately to those living, breathing sentiment beings who constitute the proletariat.

With progress in accumulation, he notes as the relation, proportionally speaking, of constant to variable capital (denoted c/v) changes, the absolute increase in the total social capital goes hand in hand with its individual constituents, just as similarly the change in capital's technical composition (c/v) of the newly valorized capital goes together with already valorized existing capital.²²⁰

Resting on the centralization of capital, this change has these consequences:

First, the demand for labor decreases relative to the size of the total capital; and, as that magnitude grows, the rate at which the demand for labor decreases does so at an accelerating rate.²²¹

Second, as a result of this growing magnitude, and the extent of capital's operations, workers are at one and same time draw into production as labor-power and throw off from or out of it. Thus, capital accumulation constantly produces a surplus population relative to its self-valorizing requirements.²²²

Third, forming a lever of capitalist accumulation, this surplus population constitutes an industrial reserve army and as such increasingly becomes a necessary premise of the hegemony of capitalism production.²²³

Fourth, itself a historical novelty, the cyclical movement of modern industrial capitalism (inclusive of crises and stagnation), leans heavily and necessarily on continual formation, absorption and formation anew of this industrial reserve army.²²⁴

Marx identifies three *active* forms of this industrial reserve army as a surplus population.

The first is the *floating*. In periods of boom the reserve of labor numerically declines, while in periods of contraction (and even in those of stagnation), it increases. Thus, over time its numbers, rising and falling "float." The second form is *latent*. The capitalization of agriculture, its industrialization, continually pushes workers off the land forming the latent element of the industrial reserve army. The third is that component which consistently has irregular work forming capital's inexhaustible supply of labor-power. It is its *stagnant* element.²²⁵

He also identifies a fourth, *passive* element, that of paupers. This stratum consists in orphans and children paupers, "the demoralized, the worn and tired, and the incapacitated. They are largely individuals who perish due to their inability to adapt to the [changing] division of labor; people whose lifespans exceed that of the average worker; finally the victims of industry, whose number increases with the growth of dangerous machinery, mining work, chemical factories, etc, the mutilated, the sickly, the widows, etc."²²⁶

From the whole of the foregoing (i.e., that concerning the relative surplus population), Marx draws the following conclusions:

The greater social wealth, that more capital that actually actively functions in production, the greater the numbers constituting the industrial reserve army.

²¹⁶*Ibid.*, 561; and 24.7: 684 where Marx states "centralization" is "expropriation of the many capitalist by a few" („der Expropriation vieler Kapitalisten durch Wenige...")

²¹⁷*Ibid.*, I, 23.2 562.

²¹⁸*Ibid.*

²¹⁹*Ibid.*, 563.

²²⁰*Ibid.*, I.23.3: 564-565

²²¹*Ibid.*, 565, 566.

²²²*Ibid.*, 565.

²²³*Ibid.*, 567.

²²⁴*Ibid.*, 569.

²²⁵*Ibid.*, I, 23.4: 575-577.

²²⁶...Verkommene, Verlumpete, Arbeitsunfähige. Es sind namentlich Individuen, die an ihrer durch die Teilung der Arbeit verursachten Unbeweglichkeit untergehen, solche, die über das Normalalter eines Arbeiters hinausleben, endlich die Opfer der Industrie, deren Zahl mit gefährlicher Maschinerie, Bergwerksbau, chemischen Fabriken etc. wächst, Verstümmelte, Erkrankte, Witwen etc." *Ibid.*, 578.

The greater this reserve relative to those actively or, as the capitalist likes to say, gainfully, employed, the greater the mass of the surplus population.

The higher labor's productivity, the more intense the pressure of workers as actively engaged in labor, that is, the more precarious become the condition for their own existence as commodified labor-power.²²⁷

To the precise extent capital accumulates, the situation of workers (without respect to level of "compensation") deteriorates. *This is the thesis of absolute proletarian immiseration.* Marx also considers it *an absolute general law of capitalist accumulation.*

²²⁷ *Ibid*, 578-580.

Original Accumulation
(Volume 1, Chapter 24)

Capitalist accumulation presupposes the availability of "large mass of capital and labor-power in the hands of commodity producers"; thus, presupposes an original accumulation, "an accumulation which is not the result of the capitalist mode of production but its point of departure."²²⁸ Lest the following leaves the reader with the impression that original accumulation refers us back to a past history that is complete, we are required to state at the outset that, to the contrary, it refers us to ongoing, ever-renewed practices.

So what constitutes such an accumulation? What is it?

It is an assemblage of wealth which can be readily transformed into money²²⁹ which, in, turn is deployed in exchange (e.g., to purchase labor-power, means of production or raw materials) for production of commodities transforming that wealth into capital.

How did it come into the hands of those who deployed it by transforming it into a "considerable mass of available capital"?

Marx provides two answers here, which, in our view, complement each other, and the reality of that complementarity is historically demonstrable.

First, "so-called original accumulation is nothing other than the historical process of separating the producer from the means of production."²³⁰ This entailed the dispossession (and proletarianization) of the peasantry and ruination of artisans (and their proletarianization together with that of journeymen and apprentices), and with their respective dispossessions the passage of their means of production and instruments of labor (land, and tools and animals in case of the former, shops and tools of their trades in the case of the latter) into the hands of the big farmer, gentry gentleman or the merchant capitalist who expropriated them.

The second answer he provides is, "In actual history, it is well-known conquest, enslavement, murder, in short, force, play the greatest role" in original accumulation.²³¹ And this notorious fact, how was it carried out? "In England at the end of the seventeenth century," the different moments of original accumulation "systematically combined together" embraced "the colonies, the national debt, the modern tax system, and the system of protection."²³²

At this level of analysis we are in fundamental and complete agreement with Marx, whose instantiation is confined to England, the first country in history to establish capitalism on its own foundations. In the remainder of this section, we shall examine original accumulation by *very briefly* reviewing the situation in the six other great capitalist powers that emerged between the beginning of the long nineteenth century (1792-1914) and the end of the short twentieth century (1915-1992). Those other six are France, the United States, Germany, Japan, Russia and China.

Before continuing, however, we shall add some *very lengthy* remarks on England.

Marx states that between the last third of the fifteenth and first few decades of the sixteenth century (circa 1467 to 1540) in England the foundations were laid for capitalist as a mode of production. He tells us that a mass of proletarians, rural producers "freed" of their proprietorship in production, by "great feudal lords" in their defiance of king and Parliament by usurping common lands. He makes far too much of this. There are three points worth making here. First, yes England did undergo a period of hybrid or *bastard* feudalism, i.e., a period in which feudal social relations on the land where overlaid by a weak statism.²³³ But the endpoint of this "development" was the War of the

²²⁸ "...das Vorhandensein größerer Massen von Kapital und Arbeitskraft in den Händen von Warenproduzenten voraus... eine Akkumulation, welche nicht das Resultat der kapitalistischen Produktionsweise ist, sondern ihr Ausgangspunkt." *Das Kapital*, I, 24.1: 641.

²²⁹ "Wealth in the form of coin; as gold or silver bars or the same in the form of goblets, serving and eating utensils, bracelets and necklaces, belts, and other ceremonial objects which can be melted down or simply sold as *objets d'art*, collector's items, decorative goods of the wealthy; precious stones; silks; and so on.

²³⁰ "Die sog. ursprüngliche Akkumulation ist also nichts als der historische Scheidungsprozeß von Produzent und Produktionsmittel." *Ibid*, 642-643.

Later, somewhat rhetorically, he asks, "What does the original accumulation of capital, i.e., its historical genesis, come down to? ...it only means the expropriation of the immediate producer, i.e., the dissolution of private property based on his own labor." („Worauf kommt die ursprüngliche Akkumulation des Kapitals, d.h. seine historische Genesis, hinaus? ... bedeutet sie nur die Expropriation der unmittelbaren Produzenten, d.h. die Auflösung des auf eigener Arbeit beruhenden Privateigentums.") *Ibid*, I, 24.7: 683.

²³¹ „In der wirklichen Geschichte spielen bekanntlich Eroberung, Unterjochung, Raubmord, kurz Gewalt die große Rolle." *Ibid*, I, 24.1: 642.

²³² In England werden sie Ende des 17. Jahrhunderts systematisch zusammengefaßt im Kolonialsystem, Staatsschuldensystem, modernen Steuersystem und Protektionssystem." *Ibid*, I, 24.6: 674.

²³³ Marx, like his epigones, operates with an uncritically, historically unevicenced concept of feudalism that is just as erroneously justified by a stagist metaphysics of history. The study, as it were, of feudalism begins with the two social formations where it historically, and independently, originated, in a geographically circumscribed region of Europe between the Loire and Rhine rivers in the period 800-1200, and in Japan between 1200 and 1600, both set of dates embracing periods of formation, ascendancy and decadence. It begins with these two social formations because *all discussions of feudalism eventually make reference or return to, tacitly or expressly, acknowledging, Frankish feudalism (or, perhaps among those operating in non-Western traditions, Japanese feudalism, as the case may be) as their source, as coordinates of reference, or as an original model which reveal its undervied and*

Roses (1455-1485) the destruction and very expense of which broke the power of Marx's feudal lords, the great magnates (and in breaking it, confirming, though not securing, the formal domination of capital over labor in production in England). Their lands passed largely into the hands of a strengthened monarchy in the person of the first Tudor, Henry VII. During the longest period in which Marx claims these great lords were pushing masses of peasants off the land, they, the lords, had already long disappeared (some in intrigues and murders during the war, many dead, killed in the battle of Bosworth), no longer existing in the sense Marx intended. Second, in the English case, while the struggle against peasant freeholds proceeded by means of enclosures, reclamation projects, rack-rents, the resurrection of ancient feudal fines, lying, cheating, theft, fraudulent means of all sorts, Marx gives no voice to perhaps the chief method of the gentry gentleman landlord and capitalist farmer in pursuing efforts at expropriation. These were legal. They consisted in bringing suit against the majority of peasant lords who held their land by copy of the court roll pursuant upon manorial custom. (Tenants-at-will were simply refused the renewal of annual rents, and told to leave, i.e., get off the land; some may have been rack-rented or simply had rents that were raised exorbitantly

architectonic form. For it only in western Europe and Japan that feudalism originally and independently appeared. It is these two formations which, investigation shows, possess qualitatively similar if not always identical characteristics, and thus provide a historical model against which all other claims are derivative, secondary or, quite frankly, suspect and against which they can be measured: It is necessary to return to the fount and origins of feudalism, to this historical moment and that geography where it first appeared in order to grasp what was distinctive and specific about it...

Based on our own researches, then, we offer the following summation:

First, feudal social relations arose out of collapse of a centralized political order and the extremes of social disintegration, violence and banditry or invasion resulting in plundering, pillage and death, and, as a consequence, politically fragmenting authority permitting a large estate to emerge as the unitary, basic form of production and governance. Private property in production was primary, a great man lorded over each estate. All significant productive, juridical and administrative functions were carried under auspices of this lord, functions that under different conditions would otherwise be deemed public. Once social disintegration had brought fragmented political authority into being, this estate was socially, historically and dialectically both premise and result of politically fragmented sovereignties (i.e., they reproduced the conditions that renewed fragmentation).

Second, estates were by and large autarkic, that is, self-contained and self-sufficient providing most of their needs out of their own resources, as feudal "society" took shape as an overwhelming rural arrangement, with severely restricted exchange beyond the borders of the estate, a very low level of the circulation of coin and virtual absence of towns.

Third, though absent a centralized state, feudal society was intensely hierarchical. The social groups that constituted the most significant layers on the estate are most adequately comprehended in class terms, in this respect in terms of relation to productive activity. The fundamental social relation on which this society of estates rested was productively grounded personal dependency: Beyond this, at every level of this social hierarchy, the man immediately below the one just above him was existentially compelled to offer his service, productive or otherwise, to him in return for protection and loyalty. Atop the social order were the lords of the territorially largest estates who formed an internally antagonistic ruling class given over to internecine struggle.

Thus, to specify the social order was characterized by the following class relations:

By the presence of a servile peasantry whose servility rested on abject personal dependency on the lord, a dependency grounded in the requirements for protection and safety in a society where violence was a daily feature of social life. Amongst this peasantry some (though neither numerically dense nor significant for production of a surplus) may have been slaves. Over historical time, servility increasingly gave way to a *nominally* free status;

by a social stratum of warriors who directly extracted rents from this peasant and, who, hierarchically organized in various degrees of rigidity, were bound to their superordinate by relations of personal dependency; and

by a layer of great lords at the top of this military class. The relation of the warriors to the great estate lords was personal and voluntary, not political, administrative or economic, one of vassalage. This relation took shape in a great lord's grant of a portion of the estate called a *fief* (of which he may have come into possession as a commendation from smaller men, not infrequently the man who was granted the *fief*) to any number of warriors in return for homage, service and loyalty.

Thus, the virtual identity of the foregoing phenomena in western Europe and Japan permits us to characterize feudalism as a historical phenomenon in these terms: Feudal social relations were hierarchical relations of personal dependency that basically operated at the level of the estate. Vassalage was one form, though exemplary and paradigmatic, these relations of personal dependency took. At the top of the social order were great lords who owned these private estates which combined juridical and administrative functions with production. The estate formed the basis of social existence that supported the entire array of groups and classes attached to it, the fundamental societal unit. Surpluses were produced by a subject peasantry whose relation to the warrior class also began from personal dependency determined by the subordination of productive activity to the warriors' requirements. The warrior class which, hierarchically organized and internally divided, ruled.

The centralized state was never a defining aspect of the rise of feudalism in western Europe, nor for that matter where feudal social relations made perhaps their only other autonomous appearance in history, in Japan.

To the contrary, feudalism only developed with the breakdown of statism, in the West first the Merovingian, and then, as a sad, failed effort at state formation, the Carolingian dynasties.

The centralized state of the Normans was necessary... not as an aspect of feudal social relations, but instead... to coordinate conquest (which was in every respect a part of the Norman's Viking heritage); for it was precisely the centralized state that dialectically was premise and outcome of, emerging to organize, territorial expansion and conquest which spelt the death knell of feudal social relations and institutions. This was never clearer than in the case of enfeoffments where in Ireland Henry II granted Strongbow (Richard de Clare, Henry's son-in-law) Leinster and specified 100 knights (to be subinfeudated, i.e., granted land with requirements for military service) *to hold it*, and granted Hugh de Lucy (a great lord and retainer in Henry's service) Meath and 50 knights *to hold it* (Jocelyn Otway-Ruthven, *A History of Medieval Ireland*. New York, 1980 (1968): 102). In Ireland, these requirements were never adequate in the face of native Irish resistance and attacks on English holdings. It certainly would have been ludicrous and absurd to

with or without entry fees and thus forced off the land in this way.) Lawyers were hired to scrutinize manorial rolls to find any evidence that ancient fines which generally accompanied annual rents had varied at some time in the past, instead of being fixed by custom. The court would then declare that in law they were arbitrary, that the copyhold land had not existed from "time immemorial," that his was no more than a tenancy-at-will, and subject to termination (expropriation) at the lord's discretion.²³⁴ Discussed above, it was the adoption of Quiritarian right, Roman concepts in their absoluteness and unconditionality, the permitted lawyers to overturn once efficacious customary law which had in the past protected the peasant copyhold. This may not have been the end of it, but in either case (tenant-at-will and copyhold ruled to be such), it was always Power (here, the force of law starting from the courts) in the personages of the sheriffs and justices of peace which carried out the act of dispossession. Third, it was the period, 1520-1660, in which the large capitalist farmer first emerged and became ascendant in England largely through consolidation of lands of small tenants either by cheap purchase of a tenant going under, or through market competition in which his "economies of scale" gave him an advantage permitting him to force small tenants to the ground. Not coincidentally, this was also the era of greatest enclosure culminating in its most intense period, 1629-1659. This period had three moments, that of Charles I's "Personal Rule" (1629-1639) in which, ruling without Parliament and thus without royal subsidies, the Crown sought old sources of revenue, while enhancing conventional and traditional sources. Among the latter, a major one was appropriation through enclosure of common pasture lands and wooded areas, draining off marshlands (fens), disenfranchising of copyholders and instituting rack-rents on the more tenacious tenants, all of which, of course, with a view to engrossing Crown lands and revenues;²³⁵ the second period was that of the civil wars (1642-1648) which can be seen in calls to put an end to enclosures in the radical party (Leveller) pamphlet literature, its central documents (the first "Agreement of the People") and the demands raised in the debates at Putney, and, above all in the common soldiery actions on the line of march, i.e., in pulling down and destroying fences enclosing (corn) fields, fens, pasture areas, documented especially early in the war;²³⁶ and, the third period was entire era of the Commonwealth and Protectorate (1649-1659, with Cromwell as of course Lord Protector, 1650-1656), during which enclosures were vastly accelerated; and large and multiple reclamation projects, especially in the south and southeast of England were successfully undertaken. And, the entire point all over again, as necessary consequence, vast numbers of copyholds, freeholds, waged laborers with only that cottage and garden, were all pushed off the land, expropriated and proletarianized.²³⁷

Finally, rarely if ever mentioned, during this era (1520-1660) in which the peasantry was dispossessed there was a singular huge source of potential capital which ultimately passed into the hands of merchants as loanable capital: It was not religious fervor (of which Henry VIII was suspicious, not for the least reason because of its mass radical Protestant underpinnings), but the costs of paying off a particularly fruitless war with France (1543-1551) which drove Tudor monarchs (not just Henry, but Edward VI) to seize the enormous wealth embodied in the monastic and chantry properties from the Church of Rome at the outset of the English Reformation (1532-1541).²³⁸

expect them to form a "feudal 'army'" engaged in conquest. In both instances, this was, by the way, clearly recognized by the English crown as knight service as was a rule commuted to cash payments (scutage). *Ibid.*, 103-104.

In the bastard form (i.e., *seemingly* statist), state centralism was an illusion masking weak kingly government devolving in internecine ruling class struggle, occasionally civil war. Thus in England, just as in Japan, social life was riven, torn apart, destroyed and reconstructed, by internecine ruling class struggle: From the moment William Rufus (William II) ascended to the English crown until the end of the War of the Roses in 1485, kings were made and unmade... held captive, usurped, murdered... in England. The particular dramas of Henry I and his older brother Robert, both sons of William (the Conqueror so-called) from 1100-1106; the civil war of 1135-1154 that involved Stephen of Blois as king against Matilda (daughter of Henry I) and the barons; John's struggle against the same great lords (or their progeny) from 1204 to 1215 (ending with the signing of the Magna Carta in 1215); Henry III in 1254-1255 and 1265-1266, Richard II in 1387-1388 and 1399; and the final civil war of this epoch involving the Lancaster and York heirs of the Plantagenets, Henry VI in 1461 and 1465, Edward IV in 1470 and Richard III in 1485 where merely highpoints in this centuries long, murderous and ruinous internal ruling class struggle. Ruin should be stressed, for what was "feudal" in these social relations was destroyed by internecine struggle that at all times threatened to and more than once did spill over into civil war and was often only diverted by territorial aggrandizement (where successful).

²³⁴Brian Manning, *The English People and the English Revolution*. London, 1976: 113-114.

²³⁵Lawrence Stone, *The Causes of the English Revolution, 1529-1642*. New York, 1972: 67-68.

²³⁶Brian Manning, *Aristocrats, Plebeians and Revolution in England, 1640-1660*. London, 1996: 20-22 (pulling down fences); Overton's *An Appeal from a degenerate Representative Body, the Commons... to the free people* (17 July 1647) and the first *Agreement of the People* (27 October 1647) both reprinted in Don Wolfe, *Leveller Manifestoes of the Puritan Revolution*. New York, 1944 (pamphlet literature), and A.S.P. Woodhouse (ed.), *Liberty and Puritanism: The Army Debates at Putney, Oct. 28, 29 and Nov. 1, 1649*. London, 1974. See the transcription of the end of the first day and the second day in which the *agreement of the People* was read out and argued.

²³⁷Manning, *The English People and the English Revolution*, 112-138.

²³⁸All this, to be sure, was not the end of it. Notwithstanding a work systemically marred by a concept of economic surplus (i.e., the difference between output and consumption nationally), Paul Baran was able to show that during "little England's" systematic plunder of India, circa 1743 to 1815 ("between Plassey and Waterloo"), the British managed to extract "£500,000,000 and £1,000,000,000

* Plassey refers to Robert Clive, Baron Clive of Plassey, an English general and colonial administrator who first arrived in India as an operative in the East India Company in 1743. From 1757 to 1767 he ruled Bengal as governor and, or militarily.

Let's go back to Marx's position restating it in our own idiom and in terms of our analysis:

At an early "stage," that is prior to the formation of industrial capitals, capitalist development could not escape its determination, effectively its envelopment, by agriculture: The harvest, especially that of wheat, was decisive for a cycle. A good crop guaranteed a lower bread price, which eliminated the prospects of confronting riotous plebeian and artisan responses and thus allowed capitalists (merchant or otherwise) to hold down their wages. At the same time, it provided a market for small-scaled manufacturers' goods in farmers whose incomes benefited from the crop. But if the crop was poor, or failed, contraction, famine, perhaps starvation and in the cities economic depression was sure to follow. Not all contractions, however, started from the situation in agriculture, though in the mature "phases" of capital's epochal formal domination the major ones did... With a view to its social effects, *we designate this determination (capital's encasement by agriculture) the era of famines*, an era that came to an end with the capitalist breakout of localized markets (circa 1848) through simultaneous, revolutionary developments in transportation and communication, through the extraordinarily rapid development of railroads, telegraphs and steamships.

Thus, the first dramatic hurdle the bourgeois classes of England (and, as we shall see, elsewhere) had to clear had been the capitalization of agriculture in order to revolutionize productivity in agriculture, in the historically effective and simultaneous senses, create a surplus and proletarianize the peasantry.

This much said, it remains somewhat myopic to consider England in isolation from the rest of Europe, as well as those other regions of the world where the tentacles of accumulation reached, just as it would entail real tunnel vision to consider French, Germany, Belgium and others early entries into the capitalist world (real domination) in isolation. Of the great power imperialist nations that have arisen over the course of the long nineteenth and short twentieth centuries, only Japan, and China and to a lesser extent Russia can be said to have been said to have enough of a separate development to be taken singularly.

In this respect, we shall cite a long passage from the work of Silvia Federici which, nonetheless, succinctly states encompasses this consideration, while simultaneously stating, beyond Marx, the real meaning and significance of original accumulation. "...when we look at the beginning of capitalist development, we have the impression of being in an immense concentration camp. In the "New World" we have the subjugation of the aboriginal populations to the regimes of the mita and cuatlechifi under which multitudes of people were consumed to bring silver and mercury to the surface in the mines of Huancavelica and Potosi. In Eastern Europe, we have a "second serfdom," tying to the land a population of farmers who had never previously been ensnared. In Western Europe, we have the Enclosures, the Witch Hunt, the branding, whipping, and incarceration of vagabonds and beggars in newly constructed work-houses and correction houses, models for the future prison system. On the horizon, we have the rise of the slave trade, while on the seas, ships are already transporting indentured servants and convicts from Europe to America. "What we deduce from this scenario is that force was the main lever, the main economic power in the process of original accumulation because capitalist development required an immense leap in the wealth appropriated by the European ruling class and the number of workers brought under its command. In other words, *original accumulation consisted in an immense accumulation of labor-power—"dead labor" in the form of stolen goods, and "living labor" in the form of human beings made available for exploitation — realized on a scale never before matched in the course of history.*

Significantly, the tendency of the capitalist class, during the first three centuries of its existence, was to impose slavery and other forms of coerced labor as the dominant work relation, a tendency limited only by the workers' resistance and the danger of the exhaustion of the work-force."²³⁹ She continues, noting that, "Where workers' resistance to re-enservment could not be broken, the response was the expropriation of the peasantry from its land and the introduction of forced wage-labor. Workers attempting to hire themselves out independently or leave their employers were punished with incarceration and even with death, in the case of recidivism. A 'free' wage labor-market did not develop in Europe until the 18th century, and even then, contractual wage-work was obtained only at the price of an intense struggle and by a limited set of laborers, mostly male and adult."²⁴⁰ She remarks further the very fact that slavery and relations of personal dependency (like all Marxists and many others, she misunderstands this as "serfdom") could not be reimposed means that a contradiction between maximally exploited labor already in "short supply" (our term appropriating the capitalist characterization) and the very "reproduction of the work-force" inasmuch as the former placed the latter "in jeopardy."²⁴¹ The contradiction "exploded most dramatically in the

worth of treasure from India. The vastness of this sum can be visualized when it is considered that at the turn of the nineteenth century the aggregate capital of all joint stock companies operating in India amounted to £36,000,000," that is, taking the midpoint of the two figures some 20 times that aggregate capital of all the British joint stock companies in India. His sources are uniformly Englishmen who had actually engaged in or were immediate beneficiaries of this simply enormous plunder. Baran mistakenly believes it was this wealth alone which launched the Industrial Revolution. *The Political Economy of Growth* (New York, 1962), 277-285 (citation appears on 278).

²³⁹Silvia Federici, *Caliban and the Witch: Women, the Body and Primitive Accumulation*. Brooklyn, 2004: 64. Footnote references deleted; our emphasis. We have also substituted the term "original accumulation" for "primitive accumulation."

²⁴⁰*Ibid*, 65.

²⁴¹*Ibid*.

American colonies, where work, disease and disciplinary punishments destroyed two thirds of the native American population in the decades immediately after the Conquest. It was also at the core of the slave trade and the exploitation of slave labor. Millions of Africans died because of the torturous living conditions to which they were subjected during the Middle Passage and on the plantations. Never in Europe did the exploitation of the work-force reach such genocidal proportions, except under the Nazi regime...²⁴² And that, accordingly, he changes which the advent of capitalism introduced in the social position of women — especially at the proletarian level, whether in Europe or America — were primarily dictated by the search for new sources of labor as well as new forms of regimentation and division of the work-force.²⁴³

The conclusions which we are required to draw should be clear, even if they fly in the face of received revolutionary wisdom: "*Original accumulation*, then, was not simply an accumulation and concentration of exploitable workers and capital. It was *also an accumulation of differences and divisions within the working class*, whereby hierarchies built upon gender, as well as "race" and age, became constitutive of class rule and the formation of the modern proletariat... We cannot, therefore, identify capitalist accumulation with the liberation of the worker, female or male... On the contrary, *capitalism has created more brutal and insidious forms of enslavement*, as it has planted into the body of the proletariat deep divisions that have served to intensify and conceal exploitation."²⁴⁴

We can pause here momentarily... and begin anew our examination with those three contemporary imperialist great powers, Japan, China and Russia, which were largely (though not entirely) did not partake in the early forms of original accumulation, or did so peripherally as *objects* of formal capitalist aggrandizement.

If we go back to the end of the period of Japanese feudal decadence and the collapse of the Ashikaga *Bafuku* (circa 1441 ce), and following on it the Ōnin War (1467-1477), lasting down until 1601 Japan entered a lengthy period of the eruption of the following: Very large-scale peasant risings *and* formation of the fragmented sovereignties-based territorial great lords fully armed with large retinues of warrior retainers; civil war, economic destruction *and* renewal (infrastructural construction); the development of large towns (castle towns), seaports and seaborne trade *and* the closure of borders to trade and accompanying piracy; extensive peasant differentiation in the villages *and* the vast expansion of the merchants and the appearance of an "independent" artisan layer; and foreign war (invasion of Korea). All the paired events were more or less simultaneous.

It was not until the military rise of Toyotomi Hideyoshi that quintessentially Japanese rigid hierarchy and social stability were reestablished. Proceeding directly from his authority as regent (to a young emperor), Hideyoshi had his minions and officials carry out a meticulously detailed land survey, the *Taikō no Kenchi*, that encompassed Japan in its entirety, the northern provinces, Kantō, Home Provinces, the western provinces, Shikoku and Kyūshū. This was a massive undertaking that, beginning in 1583, was not completed until 1598 (the year of Hideyoshi's death). The survey, both carrying it out and its completion, finally revealed the real object of decades of conflict and civil war, the peasantry. The era of Ashikaga decadence (1467-1560) had been characterized by, among other things, peasant emancipation from feudal bonds. But going far beyond this, novel rural relations saw formation of peasant-gentry

²⁴² *Ibid*, 65-66. Footnote reference deleted. Thus, we can interject that more than any other great power in history, in what became the United States original accumulation was achieved by "conquest, enslavement, [and] murder."

Colonial settlers warred with natives, murdered them *en masse* whenever and wherever opportunity presented itself, and expropriated their lands. This was not enough. Natives fought back, defended themselves and reduced settler forces. But these were stateless societies, consciously organized with low demographic densities. They confronted landhungry peasants animated by a repressively desublimated (i.e., precognitively projected onto the alien native other.) hatred born of a lifetime of deference, brutalized beings product of millennia of savagely unequal statist social organization, fleeing the demographically dense European continent (i.e., escaping penury and slavish conditions of socio-economic life), a supply of whom was inexhaustible. This was still not enough. Natives did not capitulate and they did not disappear.

Statelets (colonial governments), and then an overarching state, were organized to carry the fight to native peoples. Stalemated in battle, treaties were signed only to be discarded whenever it suited the state, i.e., whenever land could be aggrandized and natives pushed westward. As their science of nature devolved into a separate technology and it developed (one of its products was already in widespread use, a technology of murder, gunpowder, handguns, muskets and cannon) were brought to bear in an intentionally conceived fight to destroy native cultures, peoples and the animal life on which they depended. Eventually, after two centuries, the remaining native peoples were forced into territorially tiny holdings, concentration camps (so-called reservations). Thus, the land was one necessary premise of original accumulation in largest part of North America.

In the southern colonies, slaves were bought in the Caribbean (Jamaica, Barbados) after original purchase on the west Africa coast and transAtlantic transport. Plantation agriculture producing tobacco, rice and cotton developed on the foundations of slave labor. Tobacco and cotton, above all the latter, were sold abroad by way of northern merchants (with factors making advances and acting as middlemen), especially to the British. The surpluses generated by plantation slave labor were recycled through Eastern banks. The profits skimmed off in these transactions were concentrated in Philadelphia, Boston and, for the greatest part, New York City. They were the basis and medium in and through the New York money market, a "world class" source of credit, was created in the 1850s, financing the giant industrial (railroad) capitals which first appeared in consolidated form after the Civil War. These recycled surpluses were of primary import in financing the premise of this later development, creating capitalist infrastructure of ports, docks, canals and highways.

²⁴³ *Ibid*, 66.

²⁴⁴ *Ibid*, 63-64. the first italicized passage appears as such in the original; the second is ours.

(*kokujin*) leagues. Through them peasants had not only imposed a settlement on the great feudal lords (*daimyo*), bringing on the collapse of Ashikaga shogunate power, before the end of Ashikaga shogunate (Hosokawa family) rule as such, peasants had begun to exercise their power through the formation of village councils (typically hierarchical with gentry serving as council elders) which organized the affairs of the village including addresses (in petitionary form) to estate lords over issues affecting the villages (such as drainage, irrigation, encroachment).

Successful implementation of the survey was the beginning of the end of peasant autonomy.

The survey was highly rationalized (in the manner that characterizes the bourgeoisie in history, which is not to say that the great estate lords of Japan in an era of warring magnates were bourgeois, for they were not, and even two hundred years later the Tokugawa shoguns were not. But, neither were they feudal.) The survey achieved a measure of rice yield in every parcel of arable land cultivated in the country.

*Precisely, carefully and systematically yet not abstractly;*²⁴⁵ *a record of the locality of each and every rice field in Japan was determined with a view to its dimensions and its yield. The method was flexible as it was honed over time, but when finally achieved (1594) it entailed a calculation of an area of rice cultivation and production by way of a measuring unit of one shaku (6.3 feet) in length with the smallest unit of area measure equal to the square of this length. On this basis, a potential yield was assessed as a fixed amount of unhulled rice harvested from a single area unit. Other factors, especially various grades of soil, entered into the calculation creating slight variations from this norm. Producing grains and vegetables, even the dry fields and garden plots were assigned a yield expressed in terms of rice. Within a non-bourgeois context, this was rationalization at its limits: Rice, like money under capitalism, functioned as a general equivalent (though not a universal one) in order to simplify procedures by reducing rent collection to a single calculation. At this moment in shogunate history rice collection by way of this method (as opposed to the collection of coin which was still subject to minting by numerous *daimyō*) offered the best means of extending Hideyoshi's control nationwide.*

But let's return to the relation of the survey to its object, the peasants in possession of the land they worked.

Thus inspected and measured, every plot, strip or piece of land was registered and, in registering, assigned to a specific individual – not a family, not a small group of families, not a village, but to the head of the household who was responsible for its cultivation.

In measuring, the survey went beyond the foregoing: It grouped the fields by villages (or a cluster of small villages). Fields were classified and distinguished according to volume yield (three classes, first, second and third), both wet and dry fields. Further distinctions were made and taken into account in a final tabulation of actual yield: These were the distance the rice had to be transported, and topography including soil variations and irrigation channel upkeep.

Since there had never before been a survey (or at least one so thorough and of such magnitude), it is also likely that it would have revealed arable cultivated land and production (i.e., a calculated amount of rice produced) below the levels reported, hence rents (increasingly tribute) below levels that might have otherwise been extracted.²⁴⁶ There was, then, peasant opposition and resistance. But the survey itself went still far beyond this.

Having identified an individual cultivator, the intent and purpose here was to extract the maximum tribute from each tiller and producer, to push the peasant to the ground and keep him there. This should be understood in both of its potential senses; first, the now atomized peasant was to be fixed to the soil where, second, exploitation could be carried out to the maximum... Honda Masanobu, an advisor in whom Hideyoshi put much store, infamously remarked the state rested on the peasantry, and the peasant was to be handled gingerly, leaving him with just enough food to live on, no more, the rest to be appropriated as tribute²⁴⁷ ... *As if to create, then put a nail in, a collective coffin of the peasantry, in collecting the tribute consisting in the largest quantities of rice which could be squeezed from it, the *daimyō*, and above all the shogunate, could control the market in its sale and thereby largely eliminated the peasants chances of unhinging themselves from the soil that Hideyoshi and the Tokugawa after him sought to fix them to. To this nail another was added: Feudal rents tended to be fixed as they first emerged from the *shōen* system and later developed under lords whose power was based on autarkic *fiefs*; however, under the new rationalized arrangement the amount extracted rose if the yield grew, and, it appears, even if it did not.*²⁴⁸

Indeed the Tokugawa shogunates, who ruled in excess of the next two century (1601-1866), reconstituted Japan as a modern, militarily despotic tributary formation. They were able to do so for the most part because they successfully carried forward Hideyoshi's program of peasant atomization (destroying its organic intelligentsia based in the village

²⁴⁵The account immediately following will show that a general rule is not uniformly applied to a material substratum (the rice field itself) considered indifferently or simply as material or "matter" so-called. This level of abstraction did not, and we suggest it could not, develop on the basis of social relations lacking mediation by a universal equivalent (i.e., by a "third" commodity other than the two exchanged, which in and of itself has no intrinsic usable value but nonetheless can be exchanged with all other goods which do and thus can be accumulated and appear in the reified form as social wealth itself). And this is why Japan culture at this moment in its history did not disclose penetration of a bourgeois *mentalité*.

²⁴⁶George Samson, *A History of Japan, Vol. II, 1334-1615*. Stanford (CA), 1961: 317.

²⁴⁷George Sansom, *A History of Japan. Vol. III: 1615-1867*. Stanford (CA), 1963: 99.

²⁴⁸Wakita Osamu. "The Social and Economic Consequences of Unification," *Cambridge History of Japan. Volume 4: Early Modern Japan*. Cambridge, 1991: 106.

councils) and accelerated tribute extraction. Its depth and severity vis-a-vis the peasantry also, as noted in the footnote below, produced a class of landless rural laborers, a proletarianization which later formed the labor-power exploited in the post-1868 industrialization in textiles and military armaments. And even as a historical cycle of peasant risings commenced after 1715, a class of warrior (*samurai*) arms constituting an internal and rigid hierarchy of strata within a feudal ruling class now domiciled and enervated by life in castle towns was still an effective enough force, a repressive instrument of shogunate policy, to suppress agrarian revolt.²⁴⁹ Clearly, as the footnote just laid down indicates, original accumulation in Japan rested on surpluses extracted from the peasantry.

Rooted in the increasing gulf between agricultural productivity (as it slowed markedly early in the chronological eighteenth century) and tributary surpluses extracted to one side (even as they declined after 1715), and to the other the shogunate, *daimyō*, merchant and the village rich consumption, all responded to productivity stagnation by bearing down the much harder on the peasantry. Peasant response, uprisings and their growing intensity, suggest an internal impasse in the Edo era had been reached long before Commodore Perry's fleet of gunships sailed into Tokyo Bay and Yokohama harbor in July 1853...

In Russia, we are required to discuss two periods in which original accumulation transpired, one before and one after the Russian Civil War (1918-1920). The following is well established if not always well-known.

Like Germany and Japan, Russia was a late-comer to capitalism. But unlike Germany, *in Russia capitalist activity was dynamic though not the dominant form of productive activity*. Like Japan, Russia was a military despotic, modern tributary formation, one in which, centrally, all productive land belonged to the Tsar as greatest lord, like the Japanese shogun.²⁵⁰

We needn't dig too far to apprehend the contours of Russian developments.

In the latter half of the 19th century, military expenditures consumed enormous sums, and, as a whole, the autocracy's annual military budget strained the very national economy. It was the peasantry who bore the burden of the state budget.²⁵¹ The 1861 land reform, the so-called emancipation of serfs, created a new source of state revenues. Not only were peasants were compelled to pay a "redemption" fee to landlords for the worst of lands they formerly worked as they were held in serf-like state of servility, they were forced to pay direct state taxes on this newly owned land, while indirect state taxes on primitive implements, clothing, etc. were introduced. To pay these taxes, peasants were forced to sell their meager harvests - product of both poor soils and simple tools. Thereby they were thrust into a web of market relations. Taxes, on the other hand, absorbed the entirety of their cash incomes and more: From harvest to harvest peasants accumulated new, larger debts as their returns failed to meet state-imposed tax obligations.

But the taxes imposed upon the peasants could hardly generate enough revenue to keep pace with state expenditures, especially the burden of war costs as well as those involved in the merely maintaining an army and navy. The response of the Finance Ministry was to borrow - having exhausted domestic credit - on foreign money markets. Thus, for example, M.K. Reutern, Minister of Finance from 1862-1878, acquired loans totaling one billion rubles on foreign money markets during the years 1865-1875 alone.

We can summarize: Barren lands and primitive farming techniques assured low productivity and inadequate agricultural surpluses; taxes on land and on these surpluses were, not surprisingly, also inadequate to the task of maintaining a modern military establishment in order to pursue imperial ambitions (and hold off the imperialist

²⁴⁹Between 1597 and 1721, population grew about 50%; while over the next hundred and ten years (1721-1832) growth was about 7%. Based on novel inputs, fertilizers (manure, night soil, residues of consumed fish and vegetable matter), improved seed and introduction of iron plough among other inputs, agricultural productivity steadily rose, amounting to after a century about a 40% increase. But by the second decade of the chronological eighteenth century, the limits of productivity gain had been reached and stagnation set in. At the same time, the peasant families at the base of Tokugawan society supported, through the tribute, a very thin layer of wealthy farmers in the village; the *samurai*, and the *daimyō* and its lavish consumption; siphoning off a large amount of those surpluses (through the circuit of the tribute and integrated with it the circuit of coin both of which they largely created) they supported merchants as a class whose cultural efflorescence was just beginning to unfold; they supported the shogunate, both its ostentatious spending (palace, lavish castle and temple construction) and its infrastructural expenditures (reclamation projects, canals, drainage ditches, roads radiating out from the three great metropolises and even warehouse construction); and, lest we forget, part of those surpluses were generated on vast clerical estates, so they also supported the monasteries and a caste of priests, Buddhist monks. The yearly tribute, *nengu*, in bourgeois terms a ground rent euphemistically characterized as a "land tax," ranged from 40-50% of yield, at times up to 70%. Now short of large inroads of real domination into agriculture, i.e., a generalized mechanization of agriculture together with massive application of chemical fertilizers, no village peasantry engaged in paddy rice agriculture in history could experience this level of tribute extraction and still produce enough rice not to suffer dramatic curtailment of its own consumption. There were periods of crop failure - 1675, 1680, 1732, 1783-1774, 1787, 1833-1837 - each one followed by famine of on-average two years (or more). Twenty (20) were recorded. After 1730, the cycle of agrarian revolt began.

²⁵⁰Occasionally, the requisite historical proof was offered in both social formations as that greatest of lords expropriated what was otherwise *seemingly* "private" property held by a lesser lord, effectively declassing him and family. In Japan, this extended to merchant holdings such as warehouses, shops and inventories.

²⁵¹Trotsky relates during the second half of the 18th century 60% to 70% of state expenditures went for the army and navy; while as late as 1908, military spending consumed 40.5%, some 1018 million of 2495 million rubles, of the state budget. Leon Trotsky, *1905*. New York, 1971: 8.

ambitions of the economically more advanced European capitalist states). Accordingly, state, primarily military, spending put enormous strains on the national economy, while the same expenditures called forth a national debt, i.e., a very real dependency on foreign financial capital. It was in this context that the autocracy drew the appropriate lesson from the defeat inflicted on its peasants armies by the military, in part because technologically, superior armies of the British and French ruling classes in the Crimean War (1854-1856): Either modernize the precapitalist "economy" in order to militarily defend itself against European imperialist aggressors (while, of course, carrying out its own imperial designs), or suffer the consequences of future defeats. In 1856, state finances were reorganized and a finance ministry created to provide a center from which modernization could be carried out; in 1861, as already mentioned, serfdom was formally abolished thereby further forming, in the persons of poor and landless peasants, a landless rural proletariat, the social base for industrialization; during the sixties, tariffs were lowered as a direct invitation to foreign capital; after 1862, rapid construction of railway system, of which the state took complete control in 1897, was undertaken; and, again, during the sixties a number of other, restriction-bound social reforms were introduced to ease the way for sectorally limited capitalist industry.

But industrialization did not get underway in earnest until the last decade and a half of the 19th century. Even though by this time a steep tariff had been imposed at the frontiers to protect domestic (and especially state) industries, foreign capital poured in during this period - largely with a view to the cheap, unorganized labor force coming into being in Russia. As whole plants, built and originally located in Belgium, France, England and Germany, were dismantled and transported to and reconstructed in Russia down to the last nut and bolt, foreign capital began to make its presence felt in Russia. Already the German Ludwig Knapp had given impetus to the formation of a textile industry, the Englishman H.R. Hughes to the establishment of a metallurgical industry in the south, the Swedish Nobel brothers had created an oil industry in Baku, and foreign bankers such as the German Ernst Mendelssohn dominated the financial affairs of the autocracy.

Still the state remained the center from which development was carried out: With some success it regulated the influx of foreign capital, stabilized the currency, and, moreover, was the largest landowner, employer, capital investor and industrial developer, in a word the only effective socio-economic force, in Russia.

So in Russia original accumulation took place on the backs of the peasantry *and* through the massive ingression of foreign capital. Consisting in textile and metallurgical sectors (producing respectively primarily uniforms, shoes and blankets; and handguns, rifles, machine guns and ammunition, cannon, gun carriages and shells, warships as well as locomotive and cars for troop transport), a dynamic military capitalist sector existed within the dominant tributary agricultural economy and society.

Participation in world war was to set that stage for a second, far more brutal phase of original accumulation: Imperialist induced (inclusive of fourteen invading armies) civil war in the immediate aftermath of the October Revolution, atone of four years of hyper-atrophying wear and tear on plant and equipment in world war, reduced objective substance in industry *and* agriculture (urban structures, industrial landscapes, crop fields, dwellings, barns and sheds)²⁵² below levels that as such would not sustain existing society.

Once out of work, the famine forced workers back into the countryside, returned them to their peasant pasts, where food was somewhat more accessible. The cities were depopulated. Thus, Petrograd's population fell from 2,400,000 in 1917 to 547,000 in August 1920.²⁵³

In the aftermath of civil war Lenin acknowledged this vast problem, its enormous dimensions and the dangers it posed to Bolsheviks as they held power. His call for, and the implementation of, a New Economic policy and, engendered by it, a tenuous "alliance" (the vaulted *smychka*) with the peasantry secured a precarious stability and gave the Party room to maneuver - as long as grain harvests held up. The regime hobbled along until 1927 when agricultural productivity began to stagnate²⁵⁴ and while increasing harvests from 1923 until 1927 may have appeared

²⁵²Even before the civil war, the degradation of industry and agriculture was apparent: The inability to renew rolling stock and the consequent terrible disrepair of the rail system, famine conditions in the urban areas, fuel scarcity, etc., were all disastrous products of nearly four years of war, and after 1915, of the manner in which, mediately, the bourgeoisie by and large organized the war. In the end, the war organized by the liberals (and, later, revolutionary democrats) drained the country's resources, leaving it exhausted and prostrate.

²⁵³F. Lorimer, *The Population of the Soviet Union: History and Prospects*. Geneva, 1946: 41. Victor Serge put the population of Petrograd at 2,319,000 on 1 November 1915 falling to 1,480,000 on 1 July 1918, and states it would fall to less than 750,000 in 1919-1920. *Year One of the Russian Revolution*. Online edition, Chicago, 2015 (1930): 408, 589, fn. 5.

²⁵⁴In 1924-1925, gross agricultural production was 9.15 billion rubles, total industrial production was 5 billion rubles. (Respectively, these amounts constituted 71% and 71.4% of prewar totals.) Marketed goods for agriculture, however, totaled only 2.857 billion rubles (whereas those of industry came to 4.450 billion), only 63.3% of the prewar total (Yevgeny Preobrazhensky, "Economic Notes I. The Good Famine (1925)" in *The Crisis of Soviet Industrialization. Selected Essays*. White Plains, NY, 1979: 34). In terms of the most important component of actual agricultural output (and not its monetary representation), the grain harvest averaged 57.7 million tons from 1922 to 1925, or 70.7% of the prewar total (Moshe Lewin, *Russian Peasants and Soviet Power*. Aylesburg, England, 1968: 172-173).

Thus, under the N.E.P. industrial output, while having also revived, was only roughly seventy percent of the prewar total. If by far the largest customer for marketable industrial goods, in particular fertilizer and implements and seed, was the peasantry, then these

to suggest peasants were doing quite well, the prewar (1913) number of peasant families (five to a household) numbering 5-6 million *relative to the* 1927 number of peasant households, some 25 million, suggests otherwise, i.e., suggests that harvests which had not yet achieved prewar levels and now in decline were spread out over about 27.5 million more mouths to feed;²⁵⁵ in other words, the peasantry, the poor peasantry (*bednota*) in particular but clearly the middling peasant (*serednyaks*) also were far more impoverished than anyone then, and for the most part to this day, wishes to admit.

The solution of the Stalinist coterie (Molotov, Andreev, Kaganovich, Miyokan and, of course, Stalin) pursued with a brutalizing vengeance is well-known, in Molotov's words, a resort to "emergency measures" to "extort grain": Treatment as speculators (i.e. prison sentences and property confiscation) for any peasant who refused to sell grain to the state at absurdly low prices, and further legal sanctions (imprisonment) against any local party members who refuses to cooperation in forced "collections," were instituted; and then "harsh methods of persuasion" (again, Molotov) were undertaken. The latter included the present of additional cadre, thousands, who were sent to the major areas where collections were undertaken, a body of three Party offices (the infamous *troika*) to supervise each and all unit of cadre involved in grain and tax collections to and assign precise quantities of grain to be extracted from each peasant household, militia closure of local markets preventing grain sales to anyone but the regime, militia roadblocks to interdict grain movements between villages, house to house searches followed by confiscations, summons before tribunals for peasants suspected of hoarding, imposition of new, local levies, and, to be sure, the chorus of *bednota* denunciations of those suspected of hiding grain.

Emphasis on house to house search and confiscations (and a year later, a new twist, bodily removal and relocation), the 1928 grain requisitions are important because they constituted the model for forced collectivization began initially a year later, and since that collectivization taken by itself cannot be seen in isolation but instead the entire period beginning from the 1928 grain requisitions through to the completion of the collectivizations forms the historical moment and practice in and through which a renewal of original accumulation was established on the basis of the expropriation and declassing of an entire, very large stratum of the Russian peasantry (the *serednyaks*).

In this whole transcendently criminal affair, what distinguished Stalin was his fundamental intuition that developed on the basis of the experience of the grain crisis of 1928. He was fully aware of the unusual manner in which the "workers' state" extracted surpluses from the peasants: Not only subject to direct taxation, the peasants were "*paying too much* for manufactured goods, whose prices were relatively high, and ... were *losing* on the prices paid for agricultural produce." This is what he, in the framework of a monied economy, corrected characterized as *tribute* that the state imposed on the peasantry.²⁵⁶

Stalin's fundamental insight, one which he kept to himself (or, better, shared with Molotov), that the expropriation of the entire objective substance of the petty commodity peasantry as a whole could establish the basis for collectivization of the totality of agriculture which, in turn, could form the foundations for rapid, heavy industrialization

goods were also spread out over a qualitatively larger market. Such a situation led to a supply problem: Industrial goods were scarce, and, since the party allowed market determinants to prevail during this period, they were, accordingly, highly priced relative to peasant purchasing power. The latter was determined largely on the basis of what the state paid for grain and other agricultural products. That price was exceedingly low (below prewar levels) because the state itself, limited by the revenues it extracted from the peasantry (a limit imposed by the low level of agricultural product), hadn't the wherewithal (nor the desire) to pay higher prices. As a matter of policy, that price would get much lower after 1925. Accordingly, without greater industrial production, which would allow the regime to provide more industrial goods at cheaper prices to the peasantry, the constant possibility of a "scissors" crisis, the contradiction between high industrial prices and the excessively low prices of agricultural products, taken together with scarce character of these overpriced manufactured products, a situation otherwise known as the "goods famine," confronted the Soviet state for most of the period defined in terms of the New Economic Policy. Because these exchanges between town and country, that is, between the party-governed state and the peasantry as a whole, operated against the peasants, they would always portend difficulties for the "worker"-peasant alliance, the vaulted *smychka*. The true meaning of the scissors crisis, first examined by the Left, then, was that it posed a threat to the regime's stability. The solution (as well as the inner meaning of the crisis) was to increase the productivity of the nationalized industrial sector (Lewin, *Ibid*, 142). Its backwardness was an albatross around the neck of the party.

The grain harvests of 1925-1926 and 1926-1927, however, allowed the center-right bloc (Stalin-Bukharin and Rykov-Tomsky) in power to glibly ignore the criticism of the Left until after 1927.

In 1925-1926, this harvest leaped forward to 76.6 million tons, 94.2% of the prewar total. In 1926-1927, however, it fell to 73.1 million tons (89.6% of 1913 total), and was essentially flat the following year (1927-1928), coming to 73.3 million tons or 89.8% of the prewar total (*Ibid*, 173). Two years without increases, in fact with a net decline over the record postwar year grain harvest created a good deal of uneasiness in the party. Then in 1928-1929, the harvest fell again to 71.7 million tons (87.9% of the prewar total). To exacerbate the distress this decline created, the figures for Ukraine and the North Caucasus, which taken together had historically provided more than half of the peasantry's total marketable grain, had fallen more dramatically.

Of paramount significance for the relation of the 1928 grain crisis to the cementing of the Stalinist faction's ascendancy is Michal Reiman, *Die Geburt des Stalinismus. Die UdSSR am Vorabend der «zweiten Revolution» 1927-1929*. Frankfurt am Main, 1979. See, in particular, chapters 4-6.

²⁵⁵Five to six million, say 5.5 million at 5 persons per household.

²⁵⁶Molotov is cited from *Molotov Remembers. Inside Kremlin Politics. Conversations with Felix Chuev*. Edited, introduced and notes by Albert Resis. Chicago, 1993. Stalin's remarks occurred in a speech in July 1928 to a Central Committee session, referenced by Moshe Lewin, *Russian Peasants and Soviet Power*. Aylesburg (Eng.), 1968: 258. The emphases are Stalin's.

in a manner that mere tribute extraction never could. By appropriating not merely the grain but the implements, livestock, land, homes, and even the personal accouterments of the property owning peasantry, no matter how little each property involved, the Soviet regime would acquire the means, on the one hand, to fund at the outset of industrialization the purchase through sale of exportable grain of basic means of production, and, on the other hand, the very basic productive forces (first the land, then implements and livestock) and built environment (homes, home furnishings, personal "amenities," etc.) with which to initially establish a collectivized peasantry...

In China, original accumulation occurred at three distinct historical moments.

We already noted that by 1100 ce China had reached a level of productive development necessary to the inauguration of the capitalism mode of production proper.²⁵⁷ While there is a question of whether there existed sufficient pool of landless peasants with only their labor-power to sell,²⁵⁸ there can be no doubt that sufficient wealth was available to form the requisite capital accumulation. Moreover, Chinese was already urbanized, perhaps as much as ten percent of the population (some 6-7 million) lived in cities, a number over a hundred thousand. Other than great landed men and the retainers and bureaucracy surrounding the emperor, urban classes and strata consisted largely in merchants of various kinds (warehousers, wholesalers, retailers, traveling merchants, even peddlers), artisans, itinerant laborers and migrants, certainly in an urban population this large adequate numbers to form a class with only its labor-power to sell in order to socially reproduce itself.²⁵⁹

The centuries long period of stagnation and decline (which gave the appearance, *mere semblance*, that captured Marx's attention in the *Grundrisse*)²⁶⁰, with all its attendant and growing social inequality, came abruptly to an end as the long nineteenth century approached its midpoint: China was transformed by imperialist penetration after 1830. The central power in this drama was the British, who in defense of their right to the sale of their most lucrative commodity, opium, went to war to first defend and then defeat the Manchus. The defense was against the Taipings. The Manchu Dynasty, otherwise tottering and too weak to keep its hold on power, suppressed, largely with the assistance of colonial armament technology and soldiery, this last great peasant uprising (the Taiping rising) beginning in 1850.

Thereafter, colonial powers carved out massive hunks of the Chinese empire: France took the land of the Kymers and Annam in the 1860s, in the mid-1880s the British seized Burma, while Tsarist Russia instituted a "sphere of influence" in northern Manchuria. Similarly, late in the century the Japanese went to war against the Manchus, defeating the imperial army, and carved out a colony on the Korean peninsula and established a similar "sphere" in southern Manchuria. The Imperial Court was militarily helpless and its Empire began to fracture along territorial lines (largely coinciding with the imperialist "spheres of influence") governed by militaristic provincial or regional satraps otherwise known as warlords. The Sino-Japanese War (1894-1895) had made the Far East, particularly northern China, the central, global focus of intense imperialist rivalry because it exposed the *military weakness and utter financial dependency of Imperial China*, a vast territory of resources and populace that, so it appeared, awaited capitalist exploitation. Russian imperial (not imperialist) ambitions confronted the Japanese in the north.²⁶¹

The end of century saw the emergence of modern capitalist industry in China, particularly in the southeast coastal region. Textile mills (cotton and silk), bean oil processing factories, and iron ore and coal production processing facilities were constructed. The imperialist world war gave an enormous impetus to the expansion of industrial production. Annual production leaped forward. Concomitantly, the development of modern methods of communication

²⁵⁷"Law' and Tendency in Marx's Analyses," See fn. 193, above.

²⁵⁸Mark Elvin, *The Pattern of the Chinese Past*, 113, 117-118, 122-123, speaks about three centuries long dynamic agricultural expansion, landlordism and tenantry but not seasonal unemployment; yet he does mention "landless peasants and serfs." *Ibid*, 176.

²⁵⁹Elvin, *Ibid*, 175-177. In the same passages, he also suggests by 1200 ce China was the most urbanized country in the world.

To boot, by the end of the thirteen century, just as monarchical centralization was being undertaken in Europe as social power shifted upward (a massive peasant rebellion in England, and urban artisan revolts in Ghent, Bruges and Florence had been put down), still early in the epoch of capital's formal domination, in China, centered on a water-powered hemp spinning machine, the world's first mechanized industry appeared in textile production, while a new mathematics (an algebra) had also been developed. *Ibid*, 179, 196-197; 193-194.

It may not be clear while this historical potential dissipated, why China underwent a lengthy period of stagnation, then decline, yet this much is clear: An "economy in which an expanding frontier had played an important part had begun, in terms of people and resources, to 'fill.'" There was "a reduction in overseas trade and in contacts with foreigners" as the Ming adopted a Confusion hostility to commerce. "The Chinese economy was temporally denied much-needed supplies of foreign silver" and there were a significant shift in culturally hegemonic attitude toward nature as "interest in systematic investigation was short-circuited by" increasing reliance on "introspection and intuition." *Ibid*, 204.

²⁶⁰Also see the enter discussion above at fn. 192.

²⁶¹Tsarist Russia had the most to gain from limiting Japanese activity in northern China, and the most to lose if Japan became hegemonic there. The key for the Russians was completion of the TransSiberian Railroad. It was not just a matter of spatial fact. Yes, the vast eastern reaches of Tsarist Russia (Siberia) were geographically contiguous with northern China. Moreover, if a shorter route could be found (say, through northern Manchuria), not only could the time to complete construction (which had been underway since April 1890) be shortened, but such a route would avoid topographically-based technical difficulties associated with construction along the Amur River. To boot, running the railway through northern Manchuria would further create a large military foothold (with the commercial prospects that might also follow) in northeastern China.

and the material, infrastructural presuppositions, railways, telegraphs and steamships and banking as well, moved ahead rapidly.²⁶²

The situation was, in fact, somewhat similar to late 19th century Tsarist Russia in that *foreign capital poured in* to spur on this development. Again, similarly, a modern proletariat was in the initial process of formation.²⁶³ Here, then, original accumulation started from peasant expropriation and the present of foreign capital.

The last imperialist world war brought a halt to the whatever potential in China existed for capitalist development on its own foundations on the basis of original accumulation. War-wrought destruction, i.e., Japanese artillery and aerial bombardments, left much productive agricultural land ruined, and many cities with their industries (e.g., Nanking) destroyed. Only some of the port cities had intact infrastructure and limited industrial capacity. At the same time, Manchuria, occupied since early in the century, had been developed as an industrial raw materials source by Japanese occupation. (Labor-power was forcibly requisitioned: "This included forcing students, prisoners, vagrants and the floating population of unemployed or casual workers into largely unpaid and compulsory labor service, all formalized by the April 1940 [Occupation] National Army Law which sought universal conscription into the military and industrial development projects.")²⁶⁴ Here large-scale, highly mechanized, coordinated industrial enterprises operated under Japanese supervision, and, having first fallen to the *Guomindang* then as a consequence of victory in civil war to the Chinese Communist Party (CCP), represented the "most intact component of non-agricultural production that the communists inherited."²⁶⁵

In the liberated southern port cities the situation was somewhat different. Yet, first, even these cities were heavily damaged. For instance, in Guangzhou, in excess of three-quarters of the city's industrial firms were operating below capacity due to plant and, or, equipment damage; a third of the workforce was unemployed; refugees were, nonetheless, pouring into these cities. Second, the cities needed to be rebuilt, at the same the survival and sustenance of these populations largely depended on *imported* consumed food and goods. And, third, there were many owners, and managers of foreign enterprises who did not flee (some did, but would return); instead, seeking to leverage their technical and administrative skills, *and access to foreign credit*, they remained seeking favorable Party treatment.²⁶⁶ At this moment, confronting the real possibility of famine; facing blockade, with the US Pacific fleet, a good portion of its theater-based army and its air force currently domiciled in Japan (or Japanese holdings, i.e., Okinawa); with military advisors still attached to the *Guomindang* relocated to Taiwan; and, above all, facing the example of Korea where the US Army XXIX Corps (roughly a 35,000 man occupation force) materially assisted and superintended the Korean National Police (a residue of the Japanese occupation) carry out repression (including large-scale massacres, of domestic uprising and a growing liberation movement based in the countryside), this native bourgeoisie's assessment of the situation was valid, its decision to remain provided it that leverage.

Manchurian heavy industry could only serve as a point of departure for Chinese industrialization: The price of a Russian alliance, a desperately needed loan (i.e., credits) and Soviet technicians had been a free hand in dismantling (the better) parts of this industry and carrying it westward (west of the Urals) for reassembly (just like what had been done in the German East beginning in autumn 1945); the workers employed in these plants by and large lacked the requisite skill to maintain and repair machinery that had been worn down by wartime production (since at least the mid-1930s), tasks that had fallen to Japanese overseers and technicians; and once existing infrastructure, largely the rail lines (and locomotives and cars), as well as some roads (there had never been national highways), had been

²⁶²Harold Isaacs, *The Tragedy of the Chinese Revolution*, Stanford, 1961: 21-22, 35.

As a direct consequence of Imperial Chinese military weakness revealed by the war, the pace of imperialist penetration of China quickened: Even before the Sino-Japanese War ended, the Japanese had extracted a railroad concession along the western Korean shore to southern Manchuria; by the following winter, the French had wrung a further concession to build a railroad running from Indochina to an indeterminate point in southern China (and, in accordance with the Anglo-French treaty of January 1896, magnanimously extended the same privilege to Britain); and Germany had negotiated and acquired monopolistic contracts for rolling stock and rails to the Chinese owned Peking-Tientsin (Tianjin) road, not to mention settlement concessions in the cities of Hankow (Wuhan), Shanghai, and Tientsin. (Right up to 1907, and failure of Harriman led US efforts to penetrate China with a proposal to finance a projected Hsinmintun-Fakumen railroad, the Americans were locked out and remained so until well after conclusion of the first imperialist world war.) Two works that are important for understanding the situation (circa 1895-1910) in the Far East are William Pomeroy, *American Neo-Colonialism. Its Emergence in the Philippines and Asia*. (New York, 1970) and Andrew Malozemoff, *Russian Far Eastern Policy, 1881-1904 With Special Emphasis on the Causes of the Russo-Japanese War* (Berkeley, 1958).

²⁶³Once a modern industrial proletariat appeared, a vast, *potential* reserve industrial reserve also was present in an impoverished and, among many, starving landless peasantry: In this period (circa 1920), more than three hundred million (300,000,000) peasants populated rural China. As late as 1936, sixty-five percent of this peasantry was either landless or land-hungry. Detailed studies (for 1927) suggest that outside the thirteen percent (13%) of the rural population into whose hands eighty-one percent (81%) of the land was concentrated, the poor peasantry (i.e., tenant farmers), who together with rural laborers made up this vast mass, occupied on average .87 mow of land. Yet the size of plot necessary to produce the barest subsistence for a peasant family from region to region alternated between six and ten mow. Isaacs, *Ibid*, 24, 25, 26. (A mow is roughly the equivalent of one-sixth of an acre.)

²⁶⁴*Chuang 1* (2016), *Sorghum and Steel: The Socialist Developmental Regime and the Forging of China*. Section 1 (Precedents), "Rural Revolution," 37.

²⁶⁵*Ibid*, 38-39, 39 (citation).

²⁶⁶*Ibid*, 43-44 (citation, 43).

destroyed or were in disrepair.²⁶⁷ To boot, an industrial proletariat *together with* "employees" (i.e., common laborers in the cities, foremen and technicians in the enterprises)²⁶⁸ constituted less than 2% of the population of China. Sitting atop this situation, what was the CCP's solution? Foregoing the economic coercion of capital and its marketplace, it was the Stalinist solution, *tribute*,²⁶⁹ with one enormous difference: It was absent naked compulsion (coerced requisitions as gunpoint, expropriation of household substance, forced collectivization and, if meeting resistance, murder). Original accumulation was to be renewed.

There were two large components to this effort.

The first was nationalization of "bureaucratic capital" so-called and foreign firms, the banking system, domestic private forms and factories, forcing artisans and peddlers into cooperatives, and institution of urban communes. Representing different aspects of a single process, these five areas of statification lasted from 1949 through 1955.²⁷⁰ The second component was the first two Five-Year Plans, the first beginning in 1953. While plans constituted efforts to design and implement integration of various sectors of a national economy in the process of formation, for our purposes what is crucial... and, make no doubt about it, for CCP what was crucial... was establishment of a state monopoly on grain.

This started from the suppression of private plots among the peasants (by no later than 1960, already a huge misjudgment burdened by the famines that followed the Great Leap Forward so-called), and private markets based on grain sales in favor of state purchases in which Party officials set the prices of purchase and quotas for peasants and communes. This ensured an *extractive* relation. The state controlled 72% of the market by 1952,²⁷¹ and, while there were smaller setbacks, state grain procurements rose throughout the fifties (rose by 22% in 1958, 40% in 1959) until they crashed in 1959.²⁷² A state-mediated geographically visible urban-rural imbalance was patent, existing "between grain-producing and grain-consuming regions, with the grain-consumers as the primary targets of industrialization."²⁷³ That imbalance, of course, was intended, what we called *tribute*.²⁷⁴

There were other, further means of imbalanced exchange favoring the state; for instance, a mutual aid team in a commune might receive chemical fertilizers, an industrial product, in exchange for specific quantities of grain from a cooperative at terms set by the state. (The cooperative did not retain control over the whole of the grain exchanged).²⁷⁵ Or, again, whatever compensation a peasant in a cooperative (and in whatever form) it was inadequate; but she could earn workpoints which were exchanged at end of the year for grain, cash or other goods.²⁷⁶ But these were subordinate methods of extraction; the state monopoly was primarily.

The system of "socialist" accumulation provided the means and institutions, *in summa* a state grain monopoly, in and through industrialization was advanced on the backs of the peasantry; yet, in the end, "socialism" gave way to the capitalist market, the dismantling of the commune and cooperative systems, and acceleration of the tempos of real domination as Deng, starting in 1987, led the party reinserting China forcefully and fully into the system of capitalist social relations at the level of the world...

Original accumulation is neither achieved solely by dispossession and expropriation of a domestic peasantry nor it is accomplished once and for all.

Recall our earlier discussion. We recounted the avenues and channels of the social wealth generated in the non-capitalist periphery in the high era of Spanish kingship (as capital's epoch formal domination matured after 1490) through which silver, gold, precious stones and gems, silks, spices and other commodifiable wealth flowed. Tribute from the villages compelled to work as *encomienda* labor in Mesoamerica, silver from enslaved Indians in Potosi, exchange of manufactured goods for jewelry and silks and spices with Chinese, Japanese and Luchu traders, by way of wagon ship to the Caribbean, by ship to the Philippines, and then across the Atlantic and Pacific to the Atlantic to Seville; from Seville by ship to Antwerp (later straight to Amsterdam) and from here also by ship to Amsterdam's great bank. Melted down into coin or exchanged for the same, this wealth was loaned out first to Dutch firms, which failed to make the leap to real domination in production, then eventually to the English who certainly did. The

²⁶⁷ *Ibid.*, 46.

²⁶⁸ *Ibid.*, 42.

²⁶⁹ But the most fundamental characteristic of this "national economy"—the one feature that could be said to span city and countryside, determining the relationship between the two—was the implementation of the grain standard and the net funneling of resources from countryside to city." *Ibid.*, 41.

²⁷⁰ *Ibid.*, 58, 59, 60.

²⁷¹ *Ibid.*, 82.

²⁷² *Ibid.*, 81.

²⁷³ *Ibid.*, 68.

²⁷⁴ A "surplus in industry was in fact a surplus drawn from a surplus, with the product of industrial workers always only a secondary derivation of the surplus extracted from agricultural laborers. Grain was always the primary productive engine of the socialist regime of accumulation, and its alchemical transformation into steel was the surplus product of the system's net grain consumers—the industrial workforce." *Ibid.*

²⁷⁵ *Ibid.*, 76.

²⁷⁶ *Ibid.*, 77.

products of the enslaved labor of entire peoples, the hoards formed, all over the course of two centuries made their way to England where they formed part of the original fund that in part financed the Industrial Revolution. Belgium in the Congo, Germany in Southwest Africa, the British in China and north (Egypt) and west central Africa (Rwanda, Kenya), the French in Algeria and Morocco and in Indochina, Japan in Korea and China, and today US capital in Dhaka (Bangladesh) Cambodia, Honduras, the Israelis in the occupied territories and so on, original accumulation, as Rosa Luxemburg argued,²⁷⁷ was and has been renewed over and again.

²⁷⁷ *The Accumulation of Capital*. London, 2003 (2013): 375-438 (chapters 29-32), this even as she, abstractly and mistakenly, assimilates as precapitalist communities and social formations to a "natural economy" (*Ibid*, 348-365, chapter 27) which the movement of capital dissolves.

The Circuit of Money
(Vol. II, Chapter 1.1-4)

At first glance, this chapter appears merely to recapitulate a seemingly similar in the first volume of *Capital*.²⁷⁸ But this would be a mistake.

Consider the formula put forth by Marx, $M - C [= L, MP] \dots P \dots (C + c) - (M + m)$, where M = money-capital, C = capital = labor-power and means of production, thus money purchasing labor-power and means of production at the start of the production process; P = productive capital (= $C = M$, the money advanced in $M - C$); and $C + c$ = capital + an increment of capital with completion of the production process (i.e., value + surplus-value in the form of capital); and $M + m$ = money + an increment of money once the commodity is sold (i.e., value + surplus-value realized in the form of money with the completion of sale).²⁷⁹

Marx points out that while the money capital, commodity capital and productive are not independent kinds of capital but all forms of industrial capital, they go through different phases in different spheres of the total circuit of capital.²⁸⁰ Though the process (total circuit) is unitary, the different spheres can be spatially (geographically) separated.

Take production.

The production of commodities is complex yet integrated, so that the production of one commodity (steel) can be utilized as raw material in the production of another (rails, cars, engines of all sorts, etc).

Expressing the actual movement of commodities, by way of an explicative instantiation we can push this further: A single electronic component may contain a rare metal mined in China which has been transported to Malaysia where it become an element in a semi-conductor that is shipped back to China for final component construction whereafter it ends up in the German manufactured engine of an American sedan that is assembled in Mexico City. In our example, we trace out the course of a commodity, a rare earth metal which functions as raw material for an electronic component which functions as raw material in production of an engine which is a component in the final manufacture of an automobile. The original raw material, the rare earth metal, traverses the geography of east and southeast Asia in a roundtrip, whereafter it travels to Bavaria and from there to Mexico City. The geographical separation and spatial distance make for a lengthy supply chain, one that is global.

This has implications for *both* the logic of capital as its expansion moves beyond a certain point, i.e., the rate of profit tends to fall, and, relatedly, for movement of capital as its issues in crisis. Though we shall not deal with either until later, here we can simply in a general way where problems (for capital) lie.

Any sustained blockage in production, any disruption of supply chains, or non-realization in circulation can lead to a failure to produce and, or, realize surplus-value, thus to a halt to capital's movement through its circuit, thus potentially to capitalist breakdown. The primary, but not exclusive reasons why a sustained interruption of the movement of capital might occur are, in the first case, class struggle (resistance at the point of production to capital's imperative, e.g., speedups, production norms, arbitrary behavior of supervisors, etc), and, in the second case, the shrinkage or collapse in demand (which is can and has occurred, a singular outstanding example being the shutdowns in the United States and the European Union following the emergence of a global coronavirus pandemic in March 2020).²⁸¹

²⁷⁸*Das Kapital*, I, 4.1: 134-142, esp. 138. (See *Money, the Circulation of Commodities, and the Transformation of Money into Capital*, Part II, "The Circulation of Money ($M - C - M'$)," above.)

²⁷⁹Nennen wir w , in Geld ausgedrückt, g , so ist $' - G' = (W + w) - (G + g)$, und der Kreislauf $G - W \dots P \dots W' - G'$ in seiner expliziten Form also $G - W < p \dots P \dots (W + w) - (G + g)$. ("Call c , expressed in money, m . Then $C' - M' = (C + c) - (M + m)$, and in its expanded form the circuit $M - C \dots P \dots C' - M'$ is thus $M - C [= L, MP] \dots P \dots (C + c) - (M + m)$.) *Das Kapital*, II, 1.3: 42.

²⁸⁰Zwei dieser Phasen gehören der Zirkulationssphäre an, eine der Produktionssphäre. ("Two of these phases belong in the sphere of circulation, one in the sphere of production.") *Ibid*, 50.

²⁸¹Parentetical remarks added 5 March 2021.

Accumulation, Simple and Expanded Reproduction
(Volume II, Chapter, 2.2)

The expansion of the productive process, according to Marx, requires technical inputs (labor reducing instruments, machinery), i.e., it requires (and you will not find this in Marx) devices which *multiply* human labor-power output as opposed to devices or other life-forms (horses, oxen) which are merely *additive*.

Since technology rules here, several successive circuits may be necessary to achieve adequate realized surplus-value to function effectively as additional capital, that is, before this realized surplus-value can enter into a new circuit as functioning capital.²⁸² Call this capitalization.

In the prior form, realized surplus-value is merely latent (money) capital. It constitutes (Marx says congeals into) a hoard. But it is not a miser's hoard; instead, in its latent form it is realized surplus-value as a hoard is a normal part of capitalist accumulation.²⁸³ But it is not capitalized. Similarly, too, realized surplus-value which serves as a means of payment: Against a creditor's claim it is transformed into a title to ownership, but it is not capital as it functions in the process of production.²⁸⁴

Here, the circuit of capital consists in simple reproduction, i.e., it is consumed as revenue (whether in the consumption of the capitalist, in the payment of wages, or in the repayment of a loan as advanced capital). This is merely an ideal situation explored at great length in Volume I, but under normal conditions while a part of the realized surplus-value is spent as revenue another part is capitalized, that is, reenters the production process as newly purchased labor-power and means of production.²⁸⁵ This can be represented thusly: $P \dots C' \text{ — } M' \text{ — } C' (= L, MP) \dots P'$. The formula expresses the movement of productive capital, which is reproduced on an expanded basis with greater value.²⁸⁶ This is expanded reproduction.

Here Marx states, "Accumulation, or production on an expanded scale, which appears as a means for constantly augmenting production of surplus-value — thus for the enrichment of the capitalist, as his personal aim — and is immanent to the general tendency of capitalist production, through its development later becomes... a necessity for every individual capitalist. The constant increase of his capital becomes a condition of its preservation."²⁸⁷

Marx also tells us this necessity has been presented in Volume I, yes but not concisely. In this respect, we can offer the following as a fair re-presentation of Marx's position:

For the most part, an individual capitalist rarely wins for herself a monopoly in the sale of commodities. Patently, monopolies exist; yet they are not determinate for the system of social relations (capitalism): The mass of capitalists face competitive conditions when seeking to market their commodities. Setting aside conditions of product scarcity (which, at any rate is opposed to the actual tendency of capitalist development, product excess), capitalists must confront other capitalists who attempt to sell like if not altogether identical commodities. Thus, as a matter of course capitalists must match or better the price of their competitors. Fearing competitive ruin, capitalists are compelled to achieve a cost advantage in the production of their commodity. From this viewpoint, profitability is realized only if costs of production of a commodity are lower than the average in the industry in question. (Call that average socially necessary labor time embodied in a given commodity.) So capitalists are impelled by the desire to accumulate wealth in monetary form; simultaneously, they fear competitive ruin. Achieving the one and the other is contingent on lowering costs of production of their commodity below that of their competitors. *But each and every capitalist as a capitalist is both motivated by the same desire and compelled by the same fear. Ineluctably the activity of capitalists as a group exercises an inescapable compulsion on each one, creating an objective necessity beyond the control of any individual capitalist. It is this objective necessity which we call the logic of capital.*

Because each and every capitalist seeks to push down production costs, the amount of socially necessary labor time embodied in each commodity over time declines as the mass of commodities produced increases. This decline too confronts each and every capitalist as an objective necessity, an event of a total societal production process simply and unavoidably beyond her control. And, yet, this decline is the objective outcome of each and every capitalist's efforts to reduce production (particularly labor) costs. So, an objective compulsion extends further as each capitalist is compelled to produce more to compensate for declining prices. This all-around increase in production leads to an impasse, as some of the growing mass of commodities will not find buyers. Historically, the outcomes of a crisis of

²⁸² *Das Kapital*, II, 2.2: 73.

²⁸³ *Ibid.*

²⁸⁴ *Ibid.*, 74.

²⁸⁵ *Ibid.*

²⁸⁶ *Ibid.*, 75.

P' symbolizes a second circuit in an extant process that ideally (really, if the capitalist could simply wish or will it) constitutes the movement of an endless expansion. (The second circuit and the third, fourth, and each that follows, is not represented in this manner. Once P' is initiated, the second, third, etc. circuit will look just like the first C - M' - C', not C' - M'' - C'', C'' - M''' - C''', etc.)

²⁸⁷ Die Akkumulation oder Produktion auf erweiterter Stufenleiter, die als Mittel zu stets ausgedehnter Produktion von Mehrwerth, daher Bereicherung des Kapitalisten, als persönlicher Zweck des letztern erscheint, und eingeschlossen ist in die allgemeine Tendenz der kapitalistischen Produktion, wird aber weiter... durch ihre Entwicklung eine Nothwendigkeit für jeden individuellen Kapitalisten. Die stete Vergrößerung seines Kapitals wird Bedingung der Erhaltung desselben." *Ibid.*, 74.

overproduction are depression, social unrest and war;²⁸⁸ nonetheless, from the perspective of capital's critique the crisis of overproduction is intrinsic to, a necessary phase of, capitalist development. We recognize two general outcomes, both forms of crisis resolution: One is depression characterized by pervasive productive undercapacity and massive deflation, a tremendous devalorization of existing capital; the other is war the consequences of which are enormous destruction of capital in its various forms (including human life as labor-power, industrial landscapes, circulating commodities). Replaced by others, those who bear these social relations may disappear. In either event as forms of crisis resolution, both large-scale devalorization and actual destruction of productive forces (and with them the achieved level of their development), allow the production process on the basis of which the whole system of social relations takes shape to begin again, effectively to renew itself. Synonymous with a renewal of expansion, *what once more issues forth is precisely the logic of capital, the activity of competing capitalists from out of which forms that compelling objective necessity which subordinates each and every individual capitalist.*

²⁸⁸Marx himself was ambiguous about the causative role of overproduction in crises. Thus, for example, we have the following: „Es ist eine reine Tautologie zu sagen, daß die Krisen aus Mangel an zahlungsfähiger Konsumtion oder an zahlungsfähigen Konsumenten hervorgehn. Andre Konsumarten, als zahlende, kennt das kapitalistische System nicht, ausgenommen die sub forma pauperis oder die des „Spitzbuben“. Daß Waaren unverkäuflich sind, heißt nichts, als daß sich keine zahlungsfähigen Käufer für sie fanden, also Konsumenten.“ (“It is sheer tautology to say that crises are caused by the lack of effective demand, or of paying consumers. The capitalist system does not know any other kinds of consumption than effective ones, except that of *sub forma pauperis* or of the “swindler.” That commodities are unsaleable means only that no paying buyers have been found for them, i.e., consumers.”) *Das Kapital*, II, 20.4: 382. In contradistinction, we have this (on the assumption that underconsumption effectively differs little from overproduction): „Der letzte Grund aller wirklichen Krisen bleibt immer die Armuth und Konsumtionsbeschränkung der Massen gegenüber dem Trieb der kapitalistischen Produktion, die Produktivkräfte so zu entwickeln, als ob nur die absolute Konsumtionsfähigkeit der Gesellschaft ihre Grenze bilde.“ (“The ultimate basis for all real crises always remains the poverty and restricted consumption of the masses as opposed to the drive of capitalist production to develop the productive forces as though only the absolute consuming power of society formed their limit.”) *Das Kapital*, III, 30: 480.

We shall suggest that crises occur in historical situations where the rate of profit over time falls (more precisely, where this decline pushes down, contracts, the mass of profits) over the entire economy. See “The General Tendencies of Capitalist Development: General, Systemic Crisis of Accumulation,” below.

Fixed and Circulating Capital
Volume II (Chapter 8.1)

According to Marx, a part of the constant capital (i.e., means of production and labor-power) maintain its same use, and keep the same sensuous-material shape (more than less) in which it entered the production process. According, it carries out the same function over time, for shorter or longer periods of time, in labor-process from cycle to cycle. The paramount (and largely the only significant) instances of this portion of constant capital is machinery and buildings housing the machinery. These are the instruments of labor.²⁸⁹

While the finished product as finished exits the production process as a commodity entering circulation, instruments of labor, having entered the production process, never leave it for their useful lives. While a portion of the value of instrument of labor is transferred to each product taken separately as a function of wear and tear, the value of the instrument steadily declines; yet, that instrument itself in its sensuous-material form remains part of the production process. It is this character which gives this part of constant capital, the instrument of labor (or instruments as the case may be), the form of *fixed capital*. In contrast all other material components of capital advanced in the production process form *circulating capital*.²⁹⁰

There are some means of production which do not enter materially into the product. Marx calls these auxiliary materials or substances. Like the instrument of labor they are consumed by that instrument in carrying out their functions in production, but unlike that instrument they are consumed in a single cycle. Unlike raw materials, another means of production forming part of fixed capital, they do not form part of the finished product existing production. Marx instantiates coal burned up in a steam-engine and kerosene used in lighting. Their value, however, does transfer to the finished product. Thus, their utility and function is strictly confined to production. They do not constitute elements of fixed, but belong to circulating capital.²⁹¹ Only constant capital which functions as an instrument of labor and transfer its value, as it were, piecemeal which it itself is consumed (in wear and tear) during the course of several production cycles is fixed capital.²⁹²

A finished product which exits the production or labor process enters the sphere of circulation as a commodity even though the sole purpose in its production is to function as means of production, a use-value, for instance, a stamping machine which applies lids to containers sealing them and their contents. While it sits on the floor to be marketed in a large-scale display room or a warehouse ready for purchase, it is a commodity in the sphere of circulation, but once it is purchased on installed in a line where it performs its stamping function, it is an instrument of labor, means of production and fixed capital.²⁹³ Now, some instruments of labor may not actually sit in place, under steam or petro power they may be mobile like a tractor trailer yet they nonetheless only fulfill their functions and operate as part of the production process, thus, the semi, the locomotive or a ship.²⁹⁴ The fixed nature of some portions of constant capital is not determined by immobility, of being fixed in place but by their role and their function in the labor process. As we know, acting in production labor-power as variable capital transfers its own value to the product(s) for the period of time, say an entire day, but also an excess of value, surplus-value. So that the portion of the value of productive capital which has been advanced for labor-power is wholly transferred to the (finished) product. It, in other words, belongs to the sphere of circulation²⁹⁵ (returning to production only by virtue of the continuous renewal of labor-power). It is, thus, a component of circulating capital, as are those means of production (raw materials and auxiliary substances) which do not form fixed capital.²⁹⁶ As moments of circulating capital, those means of production are, unlike fixed capital (which is not in need of renewal, i.e., replacement, until as long as some portion of the value embodied in it remains), continually renewed, raw materials and auxiliary substance by new forms of the same in kind and labor-power by way of constant purchases.²⁹⁷

²⁸⁹ *Das Kapital*, II, 8.1: 145.

²⁹⁰ „Alle andern stofflichen Bestandtheile des im Produktionsproceß vorgeschossenen Kapitals dagegen bilden im Gegensatz dazu: Cirkulirendes oder flüssiges Kapital.“ *Ibid*, 146.

²⁹¹ *Ibid*.

The value of raw materials is transferred to the finished product in proportion to its consumption in the process of production.

²⁹² *Ibid*, 146-147.

²⁹³ *Ibid*, 147.

²⁹⁴ *Ibid*, 150.

²⁹⁵ *Ibid*, 152.

²⁹⁶ *Ibid*.

²⁹⁷ *Ibid*, 155.

Transformation of Surplus-Value into Capital (Capitalist Production on a Progressively Increasing Scale); Turnover of Capital. Effects on Profitability and Accumulation; the Reproduction and Circulation of the Aggregate Social Capital; Accumulation and Reproduction on an Expanded Scale
(Volume I, Chapter 22; Volume II, Chapter 7 and Volume III, Chapter 4;
Volume II, Chapters 17.3, 18, 21)

Transformation of Surplus-Value into Capital

The capitalist advances capital in money form. The greatest portion is laid for raw materials, machinery and requisite auxiliary substances, and a small portion for wages. He sets labor-power to work. Over a given period of time, say a year, a definite number of finished products emerge from production. These are brought to market for sale. Say the rate of surplus-value, surplus-value over variable capital (s/v), is 100%. Suppose all those finished goods brought to market are in fact sold. In money form, he realizes the original capital he advanced in wages, a portion of the capital originally advanced for machinery, the capital (or portion of it) advanced for raw materials and auxiliary substances, and, additionally, a surplus which he (and his family) consume and which, assuming he is a rationalist capitalist, he will deploy as a reinvestment fund.

The capitalist, then, deducts a certain amount of the surplus-value in monetary form for personal consumption. The rest he reinvests, renewing raw and auxiliary material inputs (which will over the course of a year exceed that of the previous year), and hiring additional workers over and above the number he already employs. Over a given period of time, again say a year, a definite number of finished products again emerge from production. With no novel machine inputs and no effort on his part to reorganize the labor process, this time the quantity of finished goods, all other things being equal, is greater than the previous year in precise proportion of the additional amount of money capital advanced that previous year. Our capitalist takes these finished goods to market, and successfully sells all. The rate of surplus-value remaining the same over the course of the second year as it was in the first, the surplus-value in monetary form he now realizes is proportionally greater by the amount, expressing it as a percentage, of the additional surplus-value invested the second year relative to the amount realized the first year.

With this surplus-value in hand he deducts a certain amount for personal consumption. The rests he reinvests in a third year in the same manner he had done so in the second. All things unchanged, he will again realize surplus-value in the same manner as in the previous year. That, the second and third year realizations of surplus-value, constitutes capital accumulation. No longer simple reproduction, accumulation resolves itself into reproduction in a progressively increasing scale (*„die Akkumulation auf in Reproduktion des Kapitals auf progressiver Stufenleiter“*).²⁹⁸

Turnover Time

Marx reasonably calls a completion of a circuit of the movement of a capital its turnover. It is a periodic process measured in units of time.

With any given capital, its turnover time in its entirety is simply the summation of the duration, the time(s), of production and circulation, respectively. This periodicity can, in other words, be defined in terms of that moment of the advance of capital, in the form of money or commodities, in a specific form to its return in the same form. The formula for analysis of this turnover, and its effect on surplus-value formation, is $M - M'$.²⁹⁹

Once a capital has run through its circuit, it has, of course, returned to its original point of departure, *augmented*, and can repeat the same process, passing through a series of metamorphoses and ending each new circuit augmented, self-expanded. With Marx, we would say it is compelled to do so.³⁰⁰

As the working day is the common, ready to hand unit for the quantitative measurement of labor-power, the year is similarly the unit for measuring the turnovers of capital. This can be represented formulaically: Call the year as that measure of the turnover time, T ; call the actual turnover time of any specific capital, t ; and designate the number of its turnovers as n , then $n = T/t$.³⁰¹

The effect of the turnover on the production of surplus-value, and thus on profit can concisely stated: While resulting from the time required for turnover, the simple fact that some capital always lies fallow (as money capital, as inventoried raw materials and auxiliary substances, as finished but unsold products, as money-capital put aside for future investment), the full effects of the deployment of the total capital can never be realized; nonetheless, the shorter the duration of turnover, the less the portion of total available capital that lies fallow, the larger the amount of appropriated surplus-value, the greater the mass of profit (though not with any compelling necessity the rate). This can be quite significant. How important can be suggested by an instantiation.

²⁹⁸ *Das Kapital*, I, 22.1; 520.

²⁹⁹ *Ibid.*, II, 7: 141-142.

Marx consistently refers to the capital advanced as "capital-value" (*Kapitalwert*), indicating this advanced capital, embodying value (socially necessary labor-time), already completely functions on the basis of previous valorization.

³⁰⁰ For a general statement of what is involved here, see "The General Tendencies of Capitalist Development: General, Systemic Crisis of Accumulation," below.

³⁰¹ *Das Kapital*, II, 7: 143-144.

Capitalist A and B, hire and employ the same number of waged laborers. They deploy, similar but not the same machinery purchased from the same industrial manufacturer. B has reinvested in a later, newer and vastly improved model of the machinery A's plant houses at twice the cost. B uses the same raw materials and auxiliary substances as A, but once the labor-power B deploys sets it in motion it turns out double the finished products in the same period of time as A's machinery. In the course of a year, both A and B put all their finished products on the market, though they are regionally different markets, and are able to sell all of them, B at 70% of the price of A. In the second year of production, B has laid out \$100,000 for purchase of means of production (double the volume of finished products and here double the raw material inputs; no machinery is purchased), twice that of A. His new machinery has reduced the number of workers he employs, but has taken on new workers to handle his additional volume, and thus has laid out another \$150,000 for labor-power, the same as A. The rate of surplus-value extracted vary, however by a factor of about 1.2, A's is 100%, while B's is 120%. Monetary expressed, the total surplus-value accruing to A is \$150,000, and to B is \$180,000.³⁰² B has doubled his turnover time and his rate of surplus-value extraction has risen, but his rate of profit has fallen.

As noted, a circuit constituting turnover passes through both spheres of production and circulation. Setting aside machine inputs (which contradictorily and simultaneously increase labor's productivity, and thus the rate of profit, *and* increase the overall weight of constant capital in the organic composition of capital, and thus tendentially decrease the rate of profit), Marx examines the major ways turnover time have been reduced (during the chronological nineteenth century) in the spheres of production and circulation, each considered separately.³⁰³ In the sphere of production these came down to improvements in both the quality and production of raw materials and auxiliary substances deriving from efficiencies achieved in metallurgy (e.g., steel and iron production such as that involved in the Bessemer process) and the chemical industry (e.g., alizarin, C₁₆H₈O₄, a red-dye stuff extracted from coal-tar, actually from anthraquinone, a yellow, water-soluble crystalline powder) reduced turnover times from "years" to a few weeks.³⁰⁴ As the major improvements in the sphere of circulation which have reduced turnover times, Marx cites what have since come to be recognized as the classical examples, the railway, running alongside it the telegraph, and the steamboat. He remarks that shipping times starting or ending in India and the United States and ending or starting in Europe have been reduced from 70%-90%, thereby reducing the turnover times of total world commerce by similar amounts. As a dimension of the latter, the opening of the Suez Canal made far quicker passages to East Asia and Australia possible.³⁰⁵ It should, of course, be noted that the effect of the turnover time on the rate of profit of the total capital is contingent upon all conditions of capital (length of the working day, rate of surplus-value) being equal.

The Reproduction and Circulation of the Aggregate Social Capital

The direct process of production and the process of circulation, continually renewed, are mutually implicative, each mediating the other, each a condition of transformations occurring in the other. Taken together, the two spheres form the process of reproduction of the total or aggregate social capital. However, each *capital* taken individually is a fraction of that total social capital just as, as Marx indicates, each individual capitalist is but an element of the owners as a class. And just as the individual commodity is a link in the series of transformations of the world of commodities, so the individual capital as it goes through its transformations, its turnovers, is a link in the circuit traced out by the total social capital. But a statement of this analogous relation is valid only because of the very real, increasing socialization of capital, that is, because the interaction, interlinking and intertwining of individual capitals, no longer existing independently, creates a socialized total capital.³⁰⁶

³⁰²	costs of production in US dollars				units sold/total sales in US dollars (margin)	s/v*	s/C**
	labor-power	raw materials	amortization	surplus-value			
A	150,000	50,000	100,000	150,000	1000@450 per unit / 450,000 (33%)	100%	50%
B	150,000	150,000	200,000	180,000	2000@315 per unit / 630,000 (28%)	120%	40%

³⁰³ *Das Kapital*, III, 4: 71.

³⁰⁴ *Ibid*, 71-72.

³⁰⁵ *Ibid*, 72.

An outstanding, albeit bourgeois, analysis of the impact of the railway, telegraph and steamboat on capitalism, accelerating its development, is presented by Alfred Chandler, Jr., *The Visible Hand: The Management Revolution in American Business..* Cambridge (MA), 1977: 79-205.

³⁰⁶The total capital is not prior to, does not exist apart from and has its reality in and through the interaction and interconnections of the

* s/v is the rate of surplus-value determined as surplus-value over variable capital (represented here by the wages paid for labor-power).

** s/C is the rate of profit determined as surplus-value over constant capital (labor-power, raw materials and here the amortization costs of machinery).

This circuit of the total capital includes the direct process of production (and its two moments, the labor process and the valorization process), as well as the transformations (conversions of form) constituting it. It includes the incorporation of labor-power into production, the laborer as seller (of her labor-power) and the capitalist as buyer. It also includes the laborer's purchases of commodities, the social necessities required to reproduce herself as labor-power and the capitalist as seller of the same commodities purchased by the laborer. And it additionally includes the circulation of surplus-value, inclusive of that deducted for the capitalist's consumption.³⁰⁷

Thus, the circuit of total social capital consists in both the movement of capital through its circuit and general commodity circulation, the former inclusive of the circulation of surplus-value, the incorporation of labor-power into the direct process of production and wage payments.³⁰⁸

While an individual capital moves through its different forms - productive capital, money-capital and commodity-capital - the aggregate of individual capitals making up the total social capital are continuously side by side, as it were, moving through these different forms at various stages of formation, moving through one phase of production to another. As the circuits of individual capital interlace, premise and conclusion of each other, one and all, these interlocking movements form the movement of the total capital, the transformations of individual capitals appearing as links in the series of transformations of the total social capital.³⁰⁹

Money capital is crucial here. It has two aspects.

First, it is the form in which each individual capital appears at the start of the circuit of capital, in the purchase of variable and constant capital (labor-power and means of production). Marx calls it the prime (first) motor (*primus motor*), providing the impetus to the whole process.³¹⁰

Second, the continuously advanced money-capital stands in quite a different, quantitatively, relation to the productive capital it sets in motion. That relation is dependent on turnover time, and the relation between the latter's two moments, the working period in production and the period of circulation.

Moreover, since all the elements of capital - labor-power, the instruments of labor, raw material, auxiliary substances - must be purchased ever anew with money-capital, the scale of production - and this is as true for the total social capital as for the individual capital - depends in the sense of absolute limit on the quantity of money-capital thrown into production.³¹¹

Accumulation and Reproduction on an Expanded Scale

We have shown above how an individual capitalist engages in accumulation. Upon realizing the sale of commodities, finished products put out on the market by our capitalist, the surplus product embodying surplus-value is also turned into money. In turn, the capitalist, deducting for private consumption, reconverts the transformed surplus-value into additional elements of his productive capital. We are now at the start of the next cycle for which the increased capital, mediated by value-creating labor as labor-power, forms increased finished products. But what happens in the case of the individual capital also happens, here assumed as annual, in reproduction as a whole.

The circuits of individual capitals intertwine, means of production (machinery, raw materials, auxiliary substances) may involve long chains of component production, yet those circuits premise and necessitate one another, and form, precisely in this intertwining, the movement of the total social capital: For just as is the case of commodities that circulate simply wherein the transformation *in toto* of a commodity appears as a link in a chain of transformations, so now the individual capital appears as a link in the chain of transformation of the social capital.

Summation

Have we reached a point at which we can say what capital is, starting from our point of departure, the commodity, and rising to its aggregated social character.

The following are moments in the production of commodities: The entire work process itself which produces commodities, including the "inputs" in terms of means of production (tools, instruments, machinery and other equipment) that are directly used in the production of commodities; purchased as commodities, goods (raw materials)

individual capitals. Imagine, counterfactually, an earlier epoch in the history of capitalism; imagine it at its outset. There individual capitals could have existed independently perhaps integrated into small networks of non-capitalist petty producers, but without connection to other similar capitals in different regions of, say, Europe. But long before capitalism existed on its own foundations (self-valorizing value), interconnection and integration was an established fact. Industrial capitals are not just (psychologically) inconceivable, but logically and historically impossible operating independently and without constituting a total social capital in and through their interaction. Here, though, the whole does not dominate the parts, unless, of course, we intend an extreme situation of deep crisis where the concentrated power of individual capitals, the *state*, forces on some of the individuals capitals a course of action which is in opposition to their immediate interests.

³⁰⁷ *Ibid.*, II, 18.1: 325-326.

³⁰⁸ *Ibid.*, 326-327.

³⁰⁹ *Ibid.*, 328.

³¹⁰ *Ibid.*, II, 18.2: 328.

One wonder if he had in mind an analogical parody of the Aristotelian-Christian "prime mover."

³¹¹ *Ibid.*, 328-329.

that are incorporated into a final product during the work process; the housing (plant, warehouse, office, etc.) employed in the production of commodities; only implicit in Marx, the institutional forms (firms, corporations) that make up the socio-legal context in which commodities are produced; and, the money on the basis of which these various components of the production process are purchased. *Because they each and all are employed or engaged in the production processes in and through which capitalism as a system is created and reproduced, they are all capital.* This is capital's real nature: *Capital is value, i.e., homogenized and quantified, temporalized, objectified and materialized labor, as well as the process of its "valorization," i.e., the social relation of workers and capitalists that at once encompasses, on the one side, the practices in and through which abstraction is formed (i.e., valorization process proper in which the capacity to labor is reduced and reappears as value embodied in commodities), and, on the other side, inseparable and only analytically distinct, the subordinate work process, its various moments and components (means of production, raw materials, etc., enumerated above) as well as its useful end products. The production and expanded reproduction of capital, its valorization, constitute society's intelligible structure and forms its real "subject."*

The Tendency of the Rate of Profit to Fall
(Volume III, Chapter 13 and 14.1-6)

Here we can refer to the discussion above,³¹² forgoing discussion of the (*non-dialectically*) contradictory character inherent in the confusion of an inane effort to conjoin the concepts of "tendency" and "law," or, stated more forcefully, the attempt to synthesize bourgeois science and its theoretical critique.

Marx's Exposition of the Falling Rate of Profit

The rate of surplus-value, s/v , expressed as a percentage is the ratio of that portion of the working day devoted to the production of surplus-value and that portion devoted to the reproduction of labor-power (given in the form of the wage). This is markedly different than the rate of profit, s/C , where C is the total capital, the sum of constant capital (c) and variable capital (v).³¹³ Assuming for the sake of discussion, half of the working day is devoted to reproducing labor-power and half to the generation of surplus-value and assuming this remains constant, and thus under conditions of the extraction of the same rate of surplus-value, then rises in the value of constant capital (which would occur with increasing productivity of labor as more and more surplus-value is materialized in, having been purchased as, its fixed component, machinery) would result in a falling rate of profit.³¹⁴ On the reasonable assumption that changes in the composition of capital, c and v , are not confined to a single sphere (firm, industry, sector) of production but involve all major spheres, then the organic composition of capital as a societal average itself changes.³¹⁵ This, an increase in constant relative to variable capital, would of necessity entail a fall in the *general* rate of profit over time,³¹⁶ on the assumption of course that the intensity of exploitation of labor by capital (expressed as the rate of surplus-value) remained unchanged. As we have already, following Marx, noted and discussed with a certain inexorability capitalist development does in fact (has historically) involve(d) a relative decrease in variable relative to growth of constant capital, in other words, the same *quantity* of labor-power over time sets in motion increasingly greater amounts of constant capital (fixed capital, i.e., plant and machinery, and raw and auxiliary materials),³¹⁷ which to anticipate a later discussion³¹⁸ entails as the productivity of labor rises an equally ever increasing expulsion of labor from production,³¹⁹ and, in speaking of capital as a world system, effectively formation of global surplus population...

Under the heading of "counteracting influences" (*entgegenwirkende Ursachen*), Marx considers the various methods capital deploys to restore the rate of profit. These include increasing the intensity of worker exploitation, depressing wages below the value of labor-power - what we have termed "below reproductive costs," cheapening elements of constant capital, relative overpopulation, foreign trade and increasing capital stock. We can and will very briefly remark on each of these in turn, but here we like to simply mention a discrepancy, an incongruity or a hiatus appears between these "counteracting influences" taken separately or, we dare say, even taken together, as actions of individual capital(ist)s to combat a fall in the rate of profit and a *general* decline in that rate across the entire economy. First, though, the intensity of worker exploitation. This is straightforward.

There are two notable ways the degree of the exploitation of labor can be intensified; first by lengthening the working day (increasing the amounts of absolute surplus-value extracted), and, second, in a very specific manner by intensifying labor itself (increasing the relative surplus-value extracted). The former also includes introduction of child and female labor on a wide scale, it goes without saying at lower wage rates, involving whole families in generating surplus-value. This, Marx suggests, is the preferred method. The latter, as we said is specific, namely, the case in which new machinery which achieves greater velocities of consumption of raw materials within the same temporal span, that while producing greater wear and tear on the machine does not alter the relation of its value to the price of

³¹²"Law' of Value and Accumulation of Capital."

³¹³See "Surplus-value, Profit and the Rate of Profit," above.

³¹⁴*Das Kapital*, III, 14: 209.

³¹⁵Marx spends a good deal of time (*Ibid*, III, 8-10) demonstrating that, moving from different rates of profit among individual capitals, through different branches of production all by way of competition, to the entire economy (or at least its productive sector), it is reasonable to speak about formation of a general (or average) rate of profit. The demonstration is, for us, satisfactory and here we take it as a point of departure.

³¹⁶*Ibid*, 210.

³¹⁷*Ibid*.

And, in fact, this quantity of labor-power setting in motion greater amounts of constant capital itself declines.

It should also be remarked an increase in productivity of labor does *not* generate more new value: In identical times, the same homogeneous abstract labor is objectified and materialized as value; instead, the same quantity of value is dispersed over more finished products, commodities, so the increase in productivity results in a decline in the value of individual commodities taken singularly. Prosaically, goods can be produced more cheaply, with a tendency, monopolies notwithstanding, for the prices of these goods to fall.

³¹⁸"The General Tendencies of Capitalist Development: Technological Innovation and the Expulsion of Labor from Production."

³¹⁹*Das Kapital*, III, 14: 211.

labor which sets it in motion (i.e., which effectively circumvents the effect of an increase of constant relative to variable capital).³²⁰

Pushing wages below reproductive costs elicits a very short statement from Marx, which we cite here in full: "This is mentioned here only empirically, since, like many other things which can be adduced, it has nothing to do with the general analysis of capital but, to the contrary, belongs to the account of competition which does not appear in this work. However, it is one of the *most significant causes holding back the tendency of the rate of profit to fall*."³²¹ Indeed, in the form of wage cuts and, or, benefit losses, it may be among the very most common methods of depressing the value of labor-power.

In evidencing the cheapening elements of constant capital, Marx cites the example of the output of the machine production of cotton relative to that of a spinner with a spinning-wheel. The increase is qualitative and large-scale, and a similar situation obtains in any number of spheres of production. Expressed in capitalist terms as depreciation, the same development, i.e., increasing productivity of labor, that increases the mass of constant relative to variable capital reduces the value of its fixed capital component and thus keeps the value of constant capital from increasing as the same rate as that mass. Thus, while exhibiting the dynamic which leads to a falling rate of profit, the same develops tends to moderate that fall.³²²

More visible in capitalistically developed nations, relative overpopulation is a function, over long periods of time, of tremendous growth in the productivity of labor. In a general way, the historically constituted logic is clear enough here: Vast machine inputs across entire industries reduce the sheer number of wage-earners in production as labor's productivity, metaphorically speaking, climbs exponentially. Less workers are required to do qualitatively more work. This cheapens the value of the (potential) labor-power of the unemployment and underemployed which are counted among the reserve army of labor (today's global surplus population), and, over the long run, those employed in machine production, a process which historically has, among workers, gone under the name of deskilling. A decline, or a declining, value of labor-power lessens the variable component of constant capital ($C = v + c$), and thus tends to counteract the overall rise in C relative to mass of surplus-value in the formation of the rate of profit (C/s) hindering its fall.³²³

Foreign trade, and its expansion, work in a similar contradictory way. It simultaneously cheapens elements of constant capital (as in, for instance, the import of more advanced machinery) while also cheapening "the necessities of life" (*die nothwendigen Lebensmittel*) thereby lowering the cost of living, thus permitting capitalists to lower or hold down wages, decreasing the variable component of constant capital.³²⁴ Thus, foreign trade quickens the expansion of foreign trade, accelerating capital accumulation, while bringing about a diminution in variable relative to constant capital, at one and the same time speeding up a fall in the rate of profit.

Finally, Marx gives limited attention to the increase of capital stock, considering it supplementary. Noting that the general rate of profit has three components - interest, profits of all kinds, and ground rent, he indicates that dividends handed out to investors by joint stock companies (in today's terms, private investor owned or publicly traded corporations), technically speaking interest, is thus diverted from reinvestment in constant capital. In a negative and small way (perhaps in many instances not so small), this interest thereby doesn't go into lowering the general rate of profit.³²⁵

Class Recomposition and the Falling Rate of Profit

Just recounted, these methods are all undertaken within the immediate circuits of the movement of capital, from within in production or circulation (foreign trade). Some are even made possible simply as outcomes of capitalist development, of increases in the productivity of labor (relative overpopulation and, again, foreign trade). Like the terror (mass firings, blacklists, pass systems, and the use of thieves, thugs, and murderers as well as private police) which individual capitalists utilize in both daily struggles and as these struggles rise to the level of more pitched battles (i.e., open struggles as in strikes), from this perspective the methods enumerated by Marx to restore profitability appear as the major means at the disposal of the *individual* capitalist. Clearly, though, the activity of individual capitalists does not determine the *general* rate of profit; and, if, in the aggregate, the activity of the class of

³²⁰*Ibid.*, III, 14.1: 229-230.

³²¹"Dies wird hier nur empirisch angeführt, da es in der Tat, wie manches andre, was hier anzuführen wäre, mit der allgemeinen Analyse des Kapitals nichts zu tun hat, sondern in die, in diesem Werk nicht behandelte, Darstellung der Konkurrenz gehört. Doch ist es eine der *bedeutendsten Ursachen, die die Tendenz zum Fall der Profitrate aufhalten*." *Ibid.*, 232. Emphasis added.

³²²*Ibid.*, 232-233.

³²³*Ibid.*, 233-234.

³²⁴Or this is at least what appears to be implied in Marx's remarks: "...der auswärtige Handel theils die Elemente des konstanten Kapitals, theils die nothwendigen Lebensmittel, worin das variable Kapital sich umsetzt..." ("...foreign trade in part cheapens the elements of constant capital, and in part the necessities of life for which variable capital is exchanged.") *Ibid.*, 234. One of the literal meanings of *umsetzen*, to convert, might be more exacting but it is needlessly awkward.

³²⁵*Ibid.*, 237.

owners does unbeknownst to each individually, confronting its decline, pursue the methods outline by Marx such activity does not account for its restoration.

There are two sources of a general decline in the rate of profit considered domestically. The first follows as foreign capitals which have achieved competitive advantage with respect to technical innovation in production or costs of labor relative to domestic ones; the second is a product of working class struggle against employers, struggles which are not simply isolated, but instead characterize key industries or entire sectors (and beyond these on the rare occasion when an entire society is aflame in socially generalized class struggle).³²⁶ In either case, it is the concentrated power of capital, the state, that is brought to bear on the situation in order to restore the general rate of profit. Here we can refer back (to the last section and), as one recent instance, the situation in Wisconsin in February 2011. If one wishes to argue that this was not an effort to restore profitability but a struggle to reduce working class costs borne by the capitalist state in order to reduce revenue outflows, it can and should be pointed out that this struggle assisted private capitals domiciled in Wisconsin by demoralizing workers generally. To make the point more forcibly, recall the Reagan's firing of 10,000 air traffic controllers in 1982 launched a fourteen year long employers' offensive, so dramatically lowering reproductive costs, that it was the decisive in inaugurating a major class defeat (strung out across years of singular class confrontations) whose outcome was class recomposition, introducing a new regime of accumulation resting squarely on low-waged, casualized labor.

Reagan's and Thatcher's programs of neoliberal privatization and deregulation form the *soft* version of legitimate power (whatever the historically constituted form, e.g., "free" elections, that confers legitimacy). The *hard* version starts from the overthrow of legitimate power (as a rule by hegemonic, popularly sanctioned, thus legitimate great capitalist power) which achieves the same end through White Terror (mass murder of an entire layer of working class militants). Thus, Chile in 1973, in its purest form albeit hidden, the neoliberal model for atomizing workers as a class and drastic lowering of productive costs. Here, the "Chicago boys" (protégés of Milton Friedman, early neoliberal ideologue, no longer of the school of classical political economy instead of contemporary monetarism), backed by rightwing power and further threat of military terror, imposed a draconian austerity aimed restoring a general rate of profit across the entire economy. (With the proper changes in the nature of the account, the "shock therapy" carried out in Russia in the 1990s after the collapse of the old Soviet Union might and can be similarly understood.)³²⁷

The singular aim in all these instances is to massively degrade historically achieved levels of working class consumption, in any number of cases to drive down living standards below reproductive costs, in order to transfer enormous amounts of social wealth - latent capital - into the hands of the individual capitals, or the state as the concentrated power of capital as the case may be, to restart accumulation in the context of a falling rate of profit (even if the wealth transferred end up being largely redeployed in speculative finance).

Furthermore, over historical time, we do not see a *gradual* tendency for the organic composition of capital to rise (it is important to note this because it is this tendency that underlies that of a general fall in the rate of profit), *if* this means this rise is *not* subject to the rhythms and temps of daily struggle between workers and capital in production. In point of fact, the situation goes entirely beyond this: Class struggle, and the relation and balance of class forces is establishes, decides the composition of capital, (organic and technical) the relation (and ratio) of constant, especially its fixed component, to variable capital. Increasingly, moreover, it is the global balance of class forces, and within this framework the relations between competing states acting as national capitals,³²⁸ which is determinant.

It is, of course, the role of the greatest of great capitalist powers, the hegemon, to ensure the stability of the system of social relations, even in times of "peaceful" development. In the recent period (i.e., since the end of the last imperialist world war), we could cite numerous interventions starting from the dispatch (from Allied occupied Japan) of the US Army XXIV Corps to Korea in the south in 1946 and ending with the most recent, the deployment of US troops (together with a veritable army of Jihadists on the CIA payroll) in Syria in 2015, in which this role has been fulfilled. (And, here we could also mention the regional sideshow of other, non-hegemonic great capitalist powers interventions, such as the British in Malaysia or the French in Algeria.) But whatever ideological obfuscation (e.g., fighting communism) was propagated in capital's media spectacle, the real issues were ever twofold: First, the continuing encirclement of leading actually existing "communist" societies (Russia and China) with the *ultimate aim of overthrow and return to private capitalism (i.e., ensuring the spatial-geographical limits of the penetration of capital were nothing less than planetary); and, second, securing continuing access to industrial raw materials.*³²⁹ We would merely add that the stability of the global system of social relations is the fundamental premise of assuring the necessary (though obviously insufficient) conditions for a rise in the general rate of profit in the first place.

³²⁶There, of course, may be elements of both present in any given situation in which the general rate of profit is falling.

³²⁷To be sure, there is a long history of the state's use of armed force to overcome an impasse in accumulation which at certain point, identifiable but different in historical instances, is where a general decline in the rate of profit settles. The best known was the Nazi *Machtergreifung* in 1933 following upon September 1932 elections, and Hindenburg's appointment of Hitler as German Chancellor.

³²⁸See "Class Struggle and the Drift toward Renewed Imperialist World War," below.

³²⁹This is transparently clear in the case of Indochina and Southeast Asia. See the *Pentagon Papers*. New York, 1971: 27-28 (Document #2).

Money Capital, Credit and Banking
Origins of "Finance Capital"
In Place of Comments on Vol. III, Chapters 25-27

Part I
Theorization and Historical Development: The Theorization in
Light of Historical Development

Consider loanable money capital.³³⁰

As a product of its circulation by bankers and in markets altogether distinct from production, it develops a separable sphere (i.e., it is neither funds generated by savings out of income, nor liquidity that is accumulated by storing money as a means of exchange). A specific view consonant with Hilferding holds that loanable money capital has its origins in idle money hoards that are methodically formed by industrial firms and are, in turn, mobilized by different financial institutions. In this form, money capital is more easily mobilized and less determinate than commercial or industrial capitals linked to specific commodities or to productive capacity... *In the actual historical development of capitalism, there was a lengthy hiatus during which a vast and quickly increasing industrial productive potential stood in stark contrast to its actual, limited development.*³³¹ *In Europe, in France, Belgium and elsewhere, industrial firms were unable to generate the money capital to expand productive capacity for lack of the money capital to purchase machinery and equipment. Instead, beginning in the early 1830s (but not really effectively until the early fifties) financiers such as the Pereires, Fould and Oppenheimer looked to the incomes generated by future, large-scale development, grouping other bankers, financiers and investors to pool their resources and turned to the state (not just to sanction their projects but for additional funding), to create the massive injection of credit into production that made large-scale industrial development possible...*³³²

Now, for Hilferding following Marx, the average rate of interest on loanable money capital tends to be lower than, correspondingly, the average rate of profit of capital engaged in production or circulation. Since loanable money capital is not immediately engaged in production (and circulation) of surplus-value in its phenomenal form as profit, it's not, functionally speaking, part of the total social capital, and accordingly it does not "earn" returns in the same manner as industrial or commercial capitals: The return of this form of capital, interest, is created in production as a share of profits accruing to industrial capitals, circulated by commercial capitals. Thus, there is no "natural" rate of interest, its market rate decided by availability and demand. At the same time, the relations between industrial and loanable money capitals are not determined, or not fully, by equalization of a general rate of return through competition; instead, it is based on the specific character of interest as revenue, as a share of profit (surplus-value) created in production... *The average rate of interest on loanable money capital was not set by its existence, as it were, outside the spheres of production and circulation, not was it determined by availability and demand. Rather, it was fixed by agreement between those financiers, promoters (speculators) and men of the state that set up what were effectively great investment banks such as Cr dit Mobilier. Agreement, entailing low rates of interest... always with a view to prevailing rates of interest in other types of banking transactions, was decidedly a twofold question of encouraging rapid industrial development while securing quick, huge returns, i.e., speculative profits. Bank profitability and stockholder incomes were secured through advanced subscriptions at par to stockholders as opposed to those which stockholders in turn resold to the general public by way of the Paris Bourse far above par, and through a complete division of profits, dividends (often without any set asides as hedges against projects toured sour) as returns on investments based on original purchases of massive numbers of shares at par...*³³³

On this foundation, Hilferding elaborates a theory of banking as a form of capitalist activity that is focused on, by gathering to itself and advancing, loanable money capital. He begins with trade credit, the sale of finished goods in exchange for promissory notes, bills of exchange, instead of money. This is rudimentary, an elemental form of activity of capitals themselves pursue as they engage in production: At this level, capitalist firms (and by this hereafter we intend industrial and commercial enterprises unless otherwise noted) do not require financial institutions as such, since they immediately and without prior planning provide circulation credit to one another. Inter-firm relations spontaneously tend toward trade credit, toward systematic drawing credit from one another, from clearing and settlement of bills of exchange to facilitate circulation. On this basis, financial institutions, banks in particular develop later. Enter the banks.

³³⁰For this, see Marx, *Kapital*, III, kapitel 21-24; Rudolf Hilferding, *Finance Capital*. London, 1981 (1910): 70-124; and Costas Lapavistas, "Hilferding's Theory of Banking the Light of Steuart and Smith" in Paul Zarembka and Susanne Soederberger (eds.), *Neo-Liberalism in Crisis, Accumulation and Rosa Luxemburg's Legacy*. Edmonton, 2004: 161-180.

³³¹What strikes us retrospectively about the first half of the nineteenth century is the contrast between the enormous and rapidly growing productive potential of capitalist industrialization and its inability, as it were, to broaden its base..." Eric Hobsbawm, *The Age of Capital, 1848-1875*. New York, 1966: 33.

³³²Here see excellent work by Rondo Cameron, *France and the Economic Development of Europe*, 105-203.

³³³*Ibid*, 119-156.

The original purpose here is to put in order and ease movement of trade credit transactions among capitalist firms. At first, banks provide their own credit to firms by discounting bills of exchange. In doing so, banks tend to substitute their own liabilities, issuing bank notes, for the bills of exchange that circulate among firms. As soon as a series of systematically linked banks appear, issuance of bank credit replaces the immediate, direct trade credit established among capitalist firms, with banks assuming clearing and settlement operations relative to bills of exchange... *This is, it should be noted, intended as an ideal account of the logical genesis of a specific form of banking within capitalism, not a historical account since banks predate capitalism; but as such it is only valid at this primitive level of the development of banking within capitalism. Investment banks, on the other hand, did not appear until capitalism had achieved a level of developmental scale that potentially was adequate to continental-sized operations and they first appeared in historically advanced capitalist countries...*

Hilferding notes that banks, providing at this elementary level short-term credit to underpin movement of goods among capitalist firms, require no significant amounts of their own capital. But banks can acquire the necessary liquidity to cover their notes by drawing on the monies of industrial capitalists, as deposits, that is held back for payment of bills of exchange by offering interest as a return.

At a certain point of requisite scale, banks, as an interrelated system, are able to marshal hoarded money so-called across the entire economy. This is the basis for issues of credit in the form of loanable money capital, of credit as capital or investment. It has these features: First, it is not tied to the relation of commodity sales and promissory notes; and, second, it mobilizes money otherwise unused and inactive within the entire economy, thereby augmenting the money capital to hand for the capitalist as a class. Or so Hilferding tells us...

This, as we have seen, was not the case historically. Money hoards were never capable of providing the basis for bank mediated, industrial development across the entire economy, not even in England where, because there (and only there) capitalist development went through all its "stages" of historical development starting from the smallest firms, and there more than anywhere else, industrial development was financed out of firms' profits.³³⁴ Instead, from the perspective of existing money accumulations that development could have never have been financed; it took credit, a bet by financiers "banking" on future expansive growth, to finance development...

Hilferding assumes this investment credit, loanable money capital, is readily accessible to firms with a view to increasing either technological inputs, i.e., plant, equipment, machinery, considered as fixed capital, capital that remains for several turnovers of industrial capital where each turnover consists in input purchase, production of goods, sale of goods in that order, or a circulating capital, that is, outputs (the production of goods) that last only for a single turnover of industrial capital.

Accordingly, when loanable money capital is invested in a firm's fixed capital, the money is tied, up inaccessible, for a prolonged period of time, i.e., several turnovers. Now, Hilferding notes as a consequence that banks lose some of their liquidity, flexibility and maneuverability in their operations: They effectively now have a stake in the future of the firm. Just as effectively, in the long term, this type of long-range involvement with industrial firms throws banks' solvency into question. This forces the bank to hold substantial reserves of its own... Leading to the central, decisive assumption:

The borrowing needs of industrial firms grow as the development of capitalism itself is manifest in the expanding scale of production, and *firms are unable to marshal this money capital themselves* and thereby seek extra-firm sources for their funding requirements, secured by way of long term funding from banks... *This is all correct, but entirely inadequate: It is true to the extent we are speaking about the great imperialist powers where investment banking had a foothold, primarily France. But the same banks were largely responsible for altogether launching industrial development in the "backward" countries...*

To this point, bank lending has been primarily short-term, hence only a small portion of loanable money capital can initially be utilized for fixed investment.

Before banks can engage in regular fixed investment, they must achieve a certain size, volume, quantity of reserves, and they must spread risk out lending to a number of firms, for investment in fixed capital as a rule requires much larger sums. But once they reach this order of scale and diversification and undertake long-term investments, the relation between banks and firms changes qualitatively as the industrial system as a whole tendentially becomes bank-based... *This is either meaningless or wrong, meaningless if scale means acting at level just beyond the reaches of an individually or family operated firm employing a handful of workers; wrong if it implies that scales was something on the order reached by 1870. In the latter case, neither the industrial firms in question nor, similarly, the banks ever achieved the scale prior to the advent of investment that Hilferding assumes. To the contrary, this scale, that of fully national, continent or international operations (starting from a level of productive development consonant with a rapid expansion required to initiate these operations), as we explained above was created first in banking by fiat, by paper titles, by securities, arrangements entered into by leading financiers and the state... Banks are increasingly interested in the fate of the firm: The capacity for loan repayment, for instance, is contingent on whether*

³³⁴*Ibid*, 105, and esp. 182; and Charles Kindleberger, "Banking and Industry between the Two Wars: An International Comparison" in *Banks and Industry in the Interwar Period*. Special issue of the *Journal of European Economic History*, 13, no. 2 (Fall 1984).

that machinery, equipment, etc., that was originally funded enhances a firm's profitability, the project (e.g., new product line) for which it was intended. Banks, in other words, are compelled to increasingly monitor firms' performance, and, as a result, develop a close relation with them.

This is, for Hilferding, *finance capital* at its origins, i.e., the ascendancy over and organization of industrial capitals by banks themselves now critically understood as a specific category of capitalist development: The flexibility of loanable money capital described above, together with its non-immediate relation to production, permit banks to exercise some control in the direction of firms, which increases with the penetration of banking capital in firms' operations: Banks are the more powerful agency. This control is heightened relationally because a bank is not dependent on the outcome of any specific transaction as industrial firm may be.

This increasing control has a triple root: First, trade credit tends to move within the world as its domain, demanding not only business contacts, but large amounts of liquidity; second, the demand for investment capital invariably expands with the growth in the scale of production; and, third, banks are increasing involved in the operations of share offerings in the stock market.

Capitalism expands in scale as the scale of individual industrial firms grows. Typically, joint-stock companies, shareholder corporations, develop as the projects undertaken by industrial firms grow in scale to the point where it became necessary to locate various sources for the capital to fund these projects... *This development never actually occurred before the fiat creation, not actual historical development, of the financial institution that made it possible, that funded it: It was anticipated, projected and seized upon, the future was grasped in the form of credit, and it was this which made the whole development possible...* Shareholding is appealing to capitalists because it allows them to minimize their exposure to losses while preserving potential capital liquidity. They can, after all, always sell their shares.

Joint stock companies, corporations, are best suited to the international character of capitalist production as its scale develops: This scale requires ever anew interjections of fresh fixed capital, and in larger amounts. Corporations facilitate realization of this requirement through equity issuances, rendering restructuring production easier, with less instability; they also ease mergers and acquisitions (horizontal and vertical integration), developing and deepening capitalist concentration. All this enhances the accessibility of bank credit. Banks look on corporations (relative to, say, family ownership) more favorably since the ease with which the former can raise capital facilitates the recuperation of bank funds.

Hilferding's concept of *finance capital* is based on this close relation between banks and industrial firms as joint-stock companies (corporations), a paradigmatic example of which is the railroad. Decisive here, for banks, is the facility and safety of loans made to this type of firm. As the provision of investment credit to corporations grows so does the closeness of this relation: Banks institute regular forms of supervision over these firms, including permanent board representation that, in turn, entails actual power in and over the activities of these companies; including deepening involvement in share offerings.

But Hilferding's account is flawed in the worst way: It is an attempt to logically "deduce" the origins and formation of finance capital so-called from the an ideal reconstruction of the movement of capital, i.e., it is a purely formal schematization elaborated without regard to actual historical genesis and structure, an abstract "dialectic" of concepts that merely explicates conceptual content.

Part II

Theorization and Historical Development: Lenin and Imperialism

A Historically Specific, Non-Universal Category of Capitalist Development

The control, in our terms ascendancy, of banks over industrial firms in corporate form signifies the development by banks of investment banking functions, and methodical and regular receipt of the "promoter's profit" (*Gründergewinn*, which is equivalent to the rate of the discount of the returns anticipated from the firms' projects that has been funded by the money capital raised by investment banking):³³⁵ Finance capital is the "amalgam," interpenetration of banking and industrial capital and in this process the ascendancy of the former over the latter, deepening and intensifying as the scale of capital accumulation grows, a scale and growth it is itself developing, and fixed capital requirements balloon...

A careful reading of his *Imperialism* indicates that Lenin relied on Hobson for a mass of empirical data, and on Hilferding, not at all on Hobson, for the centrality of the category and reality of finance capital.³³⁶ But what Hilferding, and Lenin following him, altogether failed to grasp was that the origins and development of "finance capital" was

³³⁵In actual history, financiers engaged in the development of industry anticipatorily assume the rate of return on money capital invested in a project will be equal to the average rate of profit for the industry in question. Market shares of the firm, the sale of which actually raises the money capital to be invested in the firm, are determined from industry average costs of production, similar rates of return and a rate of interest that is discounted up front, i.e., after raising money capital from stock shares sales and before allocating it to the firm on behalf of which the stock issues were raised. That rate of interest is a figure socially and historically determined by prevailing rates of interest (e.g., discounts on bills of exchange, charges against floated government securities); it is effectively the promoter's profit, and minimally, the rate of return on money capital invested in marketed stock shares should never be less than it.

called forth by the late entry of nations undertaking capitalist development *after* productive activity had already achieved the level of firms operating nationally (it was not in a logical sense the necessary outcome of the development of capital as such), and that this development was *geographically circumscribed and was possessed of a socio-historically specific, "national" character*.

On the continent, the major innovation in industrial financing was *Crédit Mobilier*, founded 1852. (It can be traced back in terms of the earliest, undeveloped model to the *Société Générale de Belgique in the 1820s, banking that was devoted primarily to management of large real estate expanses*.) *Crédit Mobilier*, as well as other banks modeled on it, was responsible for not just French economic development but that of continental Europe as a whole as well,³³⁷ particularly in Spain (railroads), the Westphalia (mining), central Italy (iron manufacture and infrastructure), Austria (locomotive manufacturer), and infrastructural development in Wallachia (Romania) that included roads, bridges and rails, as well as promoting construction and funding of bridges spanning most of Europe's great rivers as well as harbor and dock works for half Europe's seaports, and beyond Europe, irrigation, embankment, damming, and road and canal construction in the lower Nile.³³⁸

Those who undertook to institutionally replicated this bank included *Darmstädter* (Germany), *Kreditanstalt* (Austria), and a number of banks instituted in Italy and Spain by *Crédit Mobilier* and its French competitors. Still other banks in Sweden and the Netherlands came under its influence in their development (though in no significant sense, especially with regard to Sweden where short-terms were far more important for industrial development)...³³⁹ In almost all cases, where that replication, influence, etc., as the case may have been, the banks in question were not just affiliated to the Pereires' *Credit Mobilier* or the Rothchild's *Société Générale*, but were set up by either one or the other. The significance of this could be seen in the presence of French bankers on the board of directors of all these other banks, for these investment houses though nominally French, were actual international organizations, nascent expressions of international capitals at their origins... All these banks were variations on *Crédit Mobilier* engaged in, for example, financing the efforts of a strong provincial utility (gasworks) to go national, funding railways and organizing rail construction companies, creating insurance companies, as well as more customary note issue, deposit and discount activities. As variations there were some distinctive differences, such as in Italy where the *Società Generale di Credito Mobiliare Italiano* handled the sale of confiscated Church lands, and in the Netherlands where the *Nederlandsch Indische Handelsbank* with branches in Batavia, Bandung, Surabaya and Singapore, among other places, functioned as a trading company (besides as an investment and mortgage bank)³⁴⁰ in spearheading Dutch imperialism. But all these banks were for the most part... largely with the exception of the Dutch bank... of purely local significance (i.e., operated on firms within national, territorial boundaries).

A slue of banks in England also modeled themselves on *Crédit Mobilier*, but all collapsed in the Overend, Gurney panic of 1866. (*Crédit Mobilier* itself collapsed in autumn 1867 and its liquidation dragged on until September 1870.)³⁴¹ By and large thereafter, British banks made only short-term credit available to industry, leaving long-term loaning to be undertaken in local markets or by the London stock exchange.

In France, after the 1860s (especially after cyclical capitalist contraction, the depression beginning anew in 1882), new banks largely abandoned long-term industrial lending: Most great industrial capitals financed internal

³³⁶At this point, it might also be noted the export of capital is not significant solely for Lenin. Rosa Luxemburg, whose theorization on this score is today often counterposed to his, relies on it, seeing it as decisively characteristic of imperialism as does Lenin. See, in particular, her *Antikritik*, kapitel 6 ("Imperialismus"), where, in defining imperialism, she explicitly notes and includes... the export of capital: "Accumulation is impossible in an exclusively capitalist environs. Thus, we find that capital has been driven since its very origin to expand into non-capitalist strata and nations; it ruins artisans and peasants, proletarianizes intermediate strata, [and entails] colonial policies, the politics of opening-up and the export of capital. The development of capitalism has been possible only through constant expansion into new spheres of production and new countries" (our translation, emphasis added).

³³⁷Kindleberger, "Banking and Industry between the Two Wars," and, of course, Cameron, *France and the Economic Development of Europe*.

³³⁸*Ibid.*, 57, 58, 55, 59, 93, 95, 96, 101, 335.

³³⁹*Ibid.*, 491-492. Swedish law did not permit incorporation until 1895. Foreign financial capitalists were, accordingly, reluctant if not unwilling to make long-term loans; while, after 1895, most of the great Swedish firms had already appeared.

³⁴⁰*Ibid.*, 181, 179.

There was one other distinctive, nay unique, development of the *Crédit Mobilier* model and that was in the Ottoman Empire. The problem here was the issuance of worthless banknotes, a deluge of it printed by both the state and countless counterfeiters.

Founded in February, 1864, the *Banque Impériale Ottomane* all the powers of a contemporary central bank of a great imperialist power, or, as Cameron states, of the "Bank of France, the *Crédit Mobilier*, and the joint-stock deposit banks combined." The powers included "monopoly of note issue, fiscal agent of the government, deposit, discount, advances, purchase and sale of securities and specie, and of merchandise on a commission basis," as well as any other functions related to banking. It further held responsibility for withdrawing paper money and bad alloy, collecting and transmitting taxes in the areas served by its branches, and servicing the public debt." The bank was formed out British institution, the Bank of Turkey, that compelled to amalgamate by the Porte with a French rival group sponsored by the *Credit Mobilier*. *Ibid.*, 187-188.

³⁴¹*Ibid.*, 190-195.

development out of profits; and, after 1919, banks engaged primarily in government loans and in foreign exchange speculation.³⁴²

In Germany (exclusive of Frankfurt and Hamburg), however, the situation was different: There the *Crédit Mobilier* model was elaborated at its extreme, where the great banks developed close relations to industrial concerns (especially mining, metallurgy, chemicals, textiles and beyond this, trade and transportation), organizing not just loans but mergers, takeovers and cartels to speed up and amplify concentration. The state itself had a major role in all this: *Deutsche Bank*, for example, was a *state* created financial institution formed in 1872 to free Germany from British (London's) tyranny over the European foreign currency exchange market and was established with the explicit intent of financing foreign trade.³⁴³

In point of fact, "finance" capital came into existence largely, though not exclusively, in central Europe. But financial capitals did not exist in this form in Britain, Netherlands, Belgium, Switzerland and France after the collapse of *Crédit Mobilier*, did not exist as a "permanent" reality in the development of capitalism but only (in France and Belgium, for example) as a historically transitory moment at the outset of massive industrialization as real domination in production generated enormous economies of scale, and this before the concentration witnessed after 1870 in the forms of vertical and horizon integration, and in trustification (USA) and cartelization (Germany).

Where it existed "independently," it was restricted to the great imperialist powers. Otherwise banks within various small powers (Italy, Spain, Portugal, Switzerland, Austria, Norway, Bulgaria, Romania, Greece; Canada, Mexico, in South American countries, China, Japan; Egypt; and Russia also) operated locally with short-term credit on domestic capital, and where (in these countries) they operated nationally or internationally they did so largely as "auxiliaries (our term) of banks that were part of a great power imperialist array."³⁴⁴

After 1870, after the predatory activity we call imperialism became a dominant, global reality, the "price" of entry into capitalism as a world system of social relation ratcheted up. *Finance capital was a historically specific response of those countries arriving late to capitalist development, arriving at that moment at which the scale of production was already massive, "foreign" capitals engaged in worldwide operations with enormous fixed capital investment in plant and equipment dominated the field on which capitalist competition played itself out, when the "price" of entry was already beyond the resources and organization of any one single enterprise (and probably any group of enterprises) among the newcomer nations. This was the situation of Germany, Russia and Japan among the emerging great powers, and a host of smaller powers who had no hope of becoming international "players," through whom the great powers, particularly their banking institutions, operated.*

...It was in a limited, partial way the case with the United States (only here the US was... not unlike Russian development in the Stalinist era, but on different assumptions... insulated from the world market, from a world price and from international competition, i.e., in its objectivistic characterization, from the law of value, by its geographic isolation which permitted it to engage in the relatively unhindered exploitation of a continent during which it developed gigantic, trustified enterprises with their economies of scale and specific forms of real domination in production, and both a conventional standing army and a navy that allowed entry into the world arena as a great imperialist power in the struggle for markets, resources and capital outlets).

Part III Politics and History

In his *Imperialism, The Highest Stage of Capitalism*, Lenin outlined a popular presentation of the development of cartels, syndicates or trusts, that is, the development of capitalist "monopoly." The combination of large and small capitalist firms into single gigantic, often vertically integrated enterprises was a tendential direction of capitalist development which Marx treated in terms of a practical logic that created concentration out of free competition.

It was the *central European specific relation of banking to industry* that Rudolph Hilferding theorized, illicitly generalizing it, in his work, *Finance Capital*, and, on the basis of this work, what Lenin discovered at the foundations of imperialism as a "higher stage" in capitalist development.

³⁴²The exceptions were *Crédit Lyonnais*, the Rothchild *Société-Générale pour favoriser le développement du Commerce et de l'Industrie en France (Société-Générale)*, *Comptoir d'Escompte* and the *Banque de Paris et des Pays-Bas*, but even these banks no longer engaged exclusively in investment banking, but gave greater emphasis to short-term commercial credit. *Ibid*, 196-197. The first three disappeared as private operations in the nationalizations of French banks in 1945. *Ibid*, 173.

³⁴³*Ibid*, 200.

Deutsche Bank, above all among German banks, should have kept apart from industrial lending. It didn't. As in the cases of all the German *Grossbanken*, tight ties were established and cultivated with heavy industry, machine exporters, and transportation capital. So that in the aftermath of the first imperialist world war, we find just these relations of these sorts obtaining, e.g., between *Siemens* and *Deutsche Bank*, *AEG* and the *Disontogesellschaft*, *Stinnes* and *Thyssen's* mining interests and the *Dresdner Bank*, *Diskontogesellschaft* and *Deutsche Bank* and *Deutsche Erdölgesellschaft* (Petroleum Company), and the list goes on. For these, Robert Brady, *The Rationalization Movement in German Industry*. Berkeley, 1933: 190, and Hjalmar Schacht, *76 Jahre meines Leben*. Bad Wörishofen, 1953: 134-137, 180.

³⁴⁴This is our reading of Cameron, *Ibid*, 201.

The specific, if not unique, relation of banking to industry which formed the underbelly of Hilferding's systematic reflection was that which developed in Austria, Germany, Italy, and Hungary and Spain, and, in a less structurally rigorous manner, in the United States³⁴⁵ and in Sweden. (In all cases but Germany it was largely the work of the Pereires, Rothschilds and their respective accomplices.) Often referred to as "industrial banks," two features distinguished them, the issuance of long terms credits used to finance industrial expansion often including investments in fixed capital and, as loan collateral, the purchase of industrial firms' equities, the basis of an industrial capital's existence as a corporation or joint stock company. It is these features that led straightaway, first, to penetration of the great industrial capitals by their financial counterparts, the seating of representatives of banks in the boardrooms of industrial firms as directors, and then, to the ascendancy of finance over industry through the complete control over the fate of the firm based on majority stockholdings. There was a situation that was either transitory or never developed in Britain, France, Belgium, the Netherlands, Sweden, etc., where great industrial firms financed their expansion out of profits and through stock market based issuances of securities, and where banks by and large engaged only in granting short term credits to industry.

Historical Premises of the Geographically Circumscribed Ascendancy of Finance over Industry

The geographical delimitation of this relation largely coincides, in Europe, with the status of those countries that were, as we have indicated, latecomers to capitalist development. (In this regard, Hilferding mistakenly based his *Finance Capital* on a universalization of this circumscribed experience, and Lenin also in his *Imperialism* in following him, imputing this societally specific banking structure to all forms of capitalist development at a certain phase in that development, a necessary phase which all societies must go through.) Surrounded by aggressive powers (France, Britain, etc.) with large territorial ambitions, these countries, or rather the states that societally organized them, had none of the advantages possessed by Britain (insularity) and those accruing to the United States (isolation and great, seemingly inexhaustible natural resources). The last point in particular is of transcendent significance: These states, as latecomers, were already locked out of immediate (colonial) access to resources, industrial raw materials, and through issuance of international loans. If the *first dramatic hurdle they had to clear had been the capitalization of agriculture* in order to revolutionize productivity in agriculture to simultaneously create a surplus and proletarianizing the peasantry,³⁴⁶ *the second great barrier was a question of overcoming the similar disadvantages domestic industrial capitals faced in the struggle for resources and markets in the arena of the world.* Britain, for example, had the advantage of years of manufacturing experience that assured product quality, disciplined labor, a well-established network of trade and distribution, and the most formidable navy in the world backing up the latter. The newly emergent American power had those vast natural resources (which relative to other newcomers made for economies of scale in the acquisition of industrial raw materials) and technologically advanced production processes that greatly enhanced labor productivity. *In these formerly backward, arriviste countries, mediated by the state as the "motor" of capitalist development, the ascendancy of finance over industry was the socially and historically significant response to this crisis.* It permitted them to reduce what ultimately was an indirect cost of immediate production, the (sometimes enormous) cost of capitalization of industrial development in the era of capital's epochal transition from formal to real domination, that precise moment in the history of capitalism at which the already colossal and still growing productivity of abstract labor, the existing magnitude of fixed capital investment and the requisite economies of scale of firms already operating beyond national borders made it impossible for single enterprises to generate the

³⁴⁵Slave production in the United States was fully integrated into world capitalism. Here planters were simultaneously non-bourgeois seigniors, planters, and great rural capitalists lords. They exercised a type of control over labor that their later Junker counterparts could have only envied, and they stymied the development of a national banking system. Though entirely decentralized, "free" banking was powerful, yet co-opted, popular classes-based reaction against capitalist development, particularly to the Panic of 1819: The destruction of the Second Bank of the United States in the 1830s served the great planters well: It inhibited the pace of northern industrialization and with it of rapid population growth in both the East and West (today's Midwest), thus preserving planter representation in the legislation (Congress) and power in the polity all out of proportion to the southern demographic density. In the absence of a truly national banking system, the compulsion exercised by a single uniform nation-wide currency in (unevenly and onesidedly) imposing the most advanced terms of capitalist development on the rest of the country (terms generated in the commercial and manufacturing centers of the Northeast) was likewise absent. *Thus, decentralized, state-centered banking practices were a material premise of political domination of the great planters, a hegemony theoretically expressed in state rights' doctrine.*

The re-institution of national banking system was driven by Union needs during the war (feeding, clothing, training, arming, transporting and re-supplying a million man military force, issuing bonds to fund these military needs, operation of the state with a deficit, etc.). But the war also gave an enormous boost to manufacturing production, with war profits allowing emerging industrialists to free themselves (at least temporarily) of foreign (primarily British) debt dependency. By 1870, truly large industrial capitals had fully emerged, were justifying (here, meaning vertically integrating), but still simply could not entirely fund their operations out of profits. For a short time, investment banking... the really important figure here was J. Pierpont Morgan... played a very large role in the United States, but nothing like that on the order of Germany.

In Sweden (see Cameron, *Ibid.*, 164-165), this development had little to do with mid-century French banking, with the attempt to generalize the *Crédit Mobilier* model. Here the *Stockholms Enshilda* Bank played a role both as investment bank in industrial development and as a more traditional merchant bank (advancing short term credit, discounting bills of exchange, etc.).

³⁴⁶Loren Goldner, "Communism is the Material Human Community." Accessed online at *Break Their Haughty Power*.

money capital that would permit them to engage in undertakings in a competitively hostile environment in which their very survival was at stake. Moreover, the "ready-made" concentration of financial resources, so to speak, facilitated a far more rapid centralization of production (mostly through horizontal integration of existing firms), eliminating or absorbing smaller firms and inefficient ones, and allowing the great industrial capitals to operate on a domestic or "national" economic terrain in a manner that had the appearance of "monopoly" that is, that assured a steady stream of sales and income, at least in most phases of a cycle of development. These were the specific advantages that the latecomers to capitalist development brought, some (Germany) more successfully and other less so (Italy), to that aspect of imperialist activity that involved struggles over markets and resources.³⁴⁷

Lenin's Appropriation of Marx and Hilferding with Respect to Banking

On the eve of the October revolution, the State Bank stood at the summit of the institutional structure of financial capital in Russia. It controlled the amount of currency in circulation, and it acted as banker to the government and larger banks as well. Thereby, it also controlled the flow of credit. It was, according to Carr, "in everything but name a department of the government" and it was even statutorily subject directly to the Finance Ministry.³⁴⁸

Beneath the State Bank in this hierarchy stood fifty joint-stock banks, seven of which accounted for over half of the deposits in the country. The core of the Russian banking system, this layer of banks was engaged in "general banking business." The bottom layer of banks consisted in "specialized banks and credit institutions" of all sizes from the very large to the very small. Their business practices were oriented to specific "branches of production, of commerce or to particular groups of the population."³⁴⁹

The first two institutional layers of the Russian financial system were central to the Bolsheviks because, as Lenin saw as early as the first months of 1916, the "concentration of capital and the growth of bank turnover" had "radically [changed] ... the significance of the banks." He noted, "A handful of monopolists subordinate to their will all the operations, both commercial and industrial, of the whole of capitalist society... [They] are enabled - by means of their banking connections, their current accounts and other financial operations - first, to ascertain exactly the financial position of the various capitalists, then to control them ... by restricting or enlarging, facilitating or hindering credit, and finally to entirely determine their fate, determine their income, deprive them of capital, [etc.]." ³⁵⁰ This was the specific, and as we already indicated, geographically specific situation of Russia.

Two years into the world war and pondering the text of *Imperialism*, Lenin might well have been asking, 'With war-wrought destruction growing and in the event of a seizure of power, how was catastrophe to be averted?' In part, it was to be avoided through the nationalization of the banks. Because, "the banks ... are the centres of modern economic life, the principal nerve centres of the whole capitalist economic system," because "it is absurd to control and regulate deliveries of grain, or the production and distribution of goods generally, without controlling and regulating bank operations," the big banks would be nationalized. And what would be the signification of this nationalization? Without it, "... no effective control of any kind over the individual banks and their operations is possible ... because it is impossible to keep track of the extremely complex, involved and wily tricks that are used in drawing up balance sheets, founding fictitious enterprises and subsidiaries, [etc.]" "[Nationalization] ... would make it possible to exercise real control - provided, of course, all the other measures indicated were carried out. Only by nationalizing the banks can the state put itself in a position to know where and how, whence and when... And only control over the banks, over the centre, over the pivot and chief mechanism of capitalist circulation, would make it possible to organize real and not fictitious control over all economic life, over the production and distribution of staple goods," etc.³⁵¹

Accordingly, control of the banking system would mean, first, the Bolsheviks could provide credit flows to insure uninterrupted production, and, conversely, they could prevent sabotage that the great bankers would otherwise be in a position to engage in; and second, it would mean that they could "accelerate technical progress," what financial capital already did to a certain extent, in a way unknown in the past because the largest banking monopolies concentrated enormous financial resources not to be found anywhere else.³⁵² Thus, with control of the banking system, as it were, in hand, the Bolsheviks would position themselves to halt the ongoing economic collapse. Or so it may have seemed.

Lenin held that the administrative apparatus - the banks, syndicates, postal service, etc.- could be taken over by

³⁴⁷In the aftermath of the last imperialist world war, the victorious American imperialists created an international financial structure that encompassed (through its mechanisms and the flows that constituted it) mere national movements of money and value, and, not so much smashed but, based on Bretton Woods, forcibly re-integrated into a boarder world structure the entire reality of national finance capitals lording over domestic industries.

³⁴⁸E.H. Carr, *The Bolshevik Revolution, 1917-1923. II*. London, 1952: 133.

³⁴⁹*Ibid*, 134.

³⁵⁰V.I. Lenin *Collected Works, XXII, Imperialism: The Highest Stage of Capitalism*. Translated from the 4th Russian edition, 1951-1960). Moscow, 1960-1970: 214-215. Emphasis deleted. Hereafter, this collection of Lenin's works will be designated as *CW*.

³⁵¹*Ibid*, 334-335. Emphasis deleted.

³⁵²*Ibid*, 224.

proletarian forces "ready-made." By wresting it from the capitalists and subordinating it to proletarian soviets, this apparatus could be enlarged, democratized, and made more comprehensive. As "proof," Lenin flatly stated this apparatus could be "set in motion' ... at one stroke by a single decree..."³⁵³ His reason for this optimism was based on the assessment that the "actual work of bookkeeping, control, registering ... is performed by employers, the majority" of which "lead a proletarian or semi-proletarian existence."³⁵⁴

With the Bolshevik ascent to power, the banks engaged in a financial boycott in an effort to cripple the party's activity. Again according to Carr, the banks "opened their doors only for a few hours a day or not at all; withdrawals were limited; and no credits and no cash were forthcoming either to meet the pressing needs of the administration or to pay wages in factories where workers had taken control."³⁵⁵ These anti-Bolshevik actions were formulated, of course, by bank owners or managements attached to big banking capitalists. The actions should have been anticipated: Bolsheviks knew their actions challenged not just the large bank owners, but financial capital itself, i.e., they sought to insert themselves into the real historical movement of capital.

As the real center of the capitalist economy lay in the hands of this capital in contrast to the earlier, competitive "stage" of capitalist development in which banks carried "the current accounts of a few capitalists," and engaged in "a purely technical and exclusively auxiliary operation"),³⁵⁶ it was the first area from which active resistance should have been expected to have come. Nonetheless, the big bank owners and their managements could not have prolonged the boycott without minimally the tacit support of their "proletarian or semi-proletarian" employees.

As it became clearer that the Bolsheviks would "retain state power," one might have expected on the basis of Lenin's characterization that some of the bank employees would have broken ranks.

They did not. After a formal demand (7 November 1917) to the director of the State Bank - nominally an institution subsumed by the new Soviet government - to turn over 10 million rubles to finance operations of the Council of People's Commissars was refused, a direct appeal the following day to "loyal" employees failed to break the boycott. Troops occupied the Bank offices and compelled compliance. Nevertheless, Bolsheviks continued to tread lightly with the big banks attempting to undercut resistance by decree (as opposed to armed coercion): The Bolshevik Finance Ministry authorized the large joint-stock banks to honor all existing arrangements. Yet the resistance of the State Bank held up currency flows rendering this attempt futile. After failed negotiations (by 14 December 1917), troops from the capital's military revolutionary committee occupied the largest private banks in Petrograd. Shortly thereafter a meeting of the Executive of the All-Russian Soviets of Workers' Deputies issued two decrees, the first of which assimilated the large private banks to the State Bank and declared banking itself a state monopoly. Still the decree did not make the nationalization real, that is, practically effective, since bank employees, even with the old management now expelled and the owners expropriated, continued the boycott. It was not until mid-January 1918 that approximately 50,000 bank employees began to work under the new regime.³⁵⁷ Rather remarkable resistance for "proletarians" Lenin merely assumed would at once cooperatively undertake the "accounting and bookkeeping" at the "foundations" of a "socialist" society.

This, then, was how the Bolsheviks actually "set in motion" the banking "apparatus."³⁵⁸

Social relations of command-obedience prevailed in the banking institutions. For Bolsheviks, it was a practical question of adapting to them (which they eventually did by expropriating the owners, kicking out the old management, and replacing it with their own); it *was not a question of altogether destroying the "apparatus" in an effort to integrate certain of its functions into a reconstruction of society on new foundations*. Without popular support among banking employees the latter option was, at any rate, not available to Bolsheviks. It would have been available in principle only to those who approached bank employees with a critique of banking institutions that saw in hierarchy a form of domination not solely based on the wage relation.

The difference between Lenin and ourselves consists in our respective views of these historically formed, institutionalized functions. Whereas in his view, these functions are necessary to any form of modern society, capitalist or socialist - hence, they are "public" and merely "administrative," in our view both their form and content are determined by their role in the reproduction of capital.

According to Lenin, the huge administrative apparatus taken over by and assimilated to the new proletarian state during the transition is an achievement of capitalism itself. "Capitalism has created an accounting apparatus in the shape of the banks, syndicates, postal service, consumers' societies, and office employees' unions... The big banks

³⁵³ CW, XXVI, "Can the Bolsheviks Retain State Power?", 106.

³⁵⁴ *Ibid.*, 107.

³⁵⁵ *The Bolshevik Revolution*, II, 134.

³⁵⁶ CW, XXII, *Imperialism*, 214.

³⁵⁷ Carr, *Ibid.*, 135-137.

³⁵⁸ *Their actual practice suggests that the foundations of an emancipated society cannot be taken over "ready-made" as an achievement of capitalism, but must be actively laid.* Actively laying these foundations can only occur, however, if those who "lay" them, in this case the bank employees, see the "apparatus" which circumscribes their working lives as congealed social relations of domination, as an institution of capitalism, which they have an interest in overturning. Bolshevik awareness never dissolved this reification. So, we might ask, what difference could it have made to bank employees to exchange one set of masters for another?

are the 'state apparatus' which we need to bring about socialism, and which we take ready-made from capitalism."³⁵⁹ "Capitalism has simplified the work of accounting and control," that work in and through which this apparatus is reproduced, "has reduced it to a comparatively simple system of bookkeeping, which any literate person can do."³⁶⁰ According, the "development of capitalism ... creates the preconditions that enable "all" to take part in the administration of the state."³⁶¹

But this administrative apparatus is an achievement as such only *on condition that it does not contain embedded within it social relations of domination peculiar to capitalism (i.e., workplace hierarchy, subordination, and oppression ultimately founded on abstraction constituted in the valorization process, on exploitation); that is, only on condition that the apparatus is thingly, a neutral medium.*

Now, it is a neutral medium because it is a necessary product of the logic and development of monopoly capital; because, in other words, the apparatus is, for Lenin, an achievement solely from the standpoint of the efficient organization of productive forces;³⁶² and, because history, of course, knows no more efficient and gigantic organization of production than capitalism. Thus, the apparatus is taken over in the transition.

The practical appropriation of the bourgeois state's administrative apparatus, its constitution as an element of the new proletarian state, is justified by reference to the unfolding, development, and organization of productive forces. It so justified because of the necessity that inheres in that process of development. "The dialectics of history is such that the war ... [has] expedite[d] the transformation of monopoly capitalism into state-monopoly capitalism... [The latter] is a complete material preparation for socialism, the *threshold* of socialism, a rung on the ladder of history between which and the rung called socialism there are no *intermediate* rungs."³⁶³

This stagist, objectivistic metaphysics rests on the belief that, underneath everything, the unfolding of history is the increasing complexity and the mounting technical sophistication of production as well as the generation of cumulative labor savings, i.e., the development of productive forces.

This development, moreover, is strictly autonomous. (Thus, Lenin expresses his own mystification concerning capital's movement.) *Productive forces, and, hence, that "huge, administrative apparatus" which is a necessary product of their development, are conceived on the model of neutral technique, while the specifically neutral character of the latter is circuitously justified by the donné character of the former's development.*

Lenin's "dialectics of history," as a methodological projection and ideal product masquerading as the real, is attributed to Marx: "The great significance of Marx's explanation is that ... he consistently applies materialist dialectics, the theory of development."³⁶⁴ The "application" refers to a scheme vulgarly derived from Hegel. Lenin understood the internal connectedness of each historical stage of development in terms of a strictly positive dialectic, that is, in terms of a necessary preservation and transcendence of previous achievements (*aufheben*). "Applied" to the "material" of history, the scheme requires that the destruction of the bourgeois state remain incomplete. *Accordingly, it is a formal scheme, one unmediated by the accumulated, reflected experience of proletarian struggle, which determines that administratively organizational achievements be taken over from capitalism.* This scheme also generates a logically consistent justification for the statist reconstruction Bolsheviks were preparing to undertake; it suggests what kinds of agencies, organizations, etc. would provide the actual infrastructure of that reconstruction; and, it permitted Lenin to deduce communism as the necessary consummation of the developmental process called "history."

The positive dialectic renders history objectivistically, and this is decisive, subsuming the relations of domination and subordination structuring the sphere of social activities, the everyday, under neutrally conceived (i.e., domination free) processes of production. It thereby occludes the productive activity of mystified subjects in favor of the projection of a flat, object-like, and pseudo-concrete daily sphere. Thus, the sphere of social activities in which capital does its dirty-work (above all other daily activities, living labor subordinated to valorization), that is, the domain wherein we might on Marxist assumptions expect to find domination originally constituted, seizes to have meaning for Lenin.

The deduction of communion from the developmental "process" of history allowed Lenin to impose a ready-made form on formless matter.

Lenin's thought, and Bolshevism generally, suffers from a certain methodological schematism akin to pathological rigidity. While the methodological issue is not decisive, it is the most adequate form in which to examine this reified thinking. Note that it recurs problematically at each level of our analysis; i.e., in the medium-matter distinction animating the concept of neutrally applicable technique, in the reified form-content distinction, with the schematic positive dialectic, and in the opposition of politics and administration on which the bequest (to socialist society) of that "huge administrative apparatus" rests. This rigidity has its conceptual genesis in instrumentalist, scientific rationality - the rationality of Bolshevism itself. The concepts of "[neutral] technique", "apparatus", and "administration" are mere

³⁵⁹ *CW*, XXVI, "Can the Bolsheviks Retain State Power?," 106.

³⁶⁰ *Ibid.*, 107.

³⁶¹ *CW*, XXV, *The State and Revolution*, 477. Emphasis deleted.

³⁶² But it is an achievement *solely* from this standpoint.

³⁶³ *CW*, XXV, "The Impending Catastrophe and How to Combat It," 363.

³⁶⁴ *CW*, XXV, *The State and Revolution*, 476.

moments of this rationality. Lenin's concept of technique is embedded in the precognitive substructure of Bolshevik thought. Technique was anticipatorily projected, having the sense of an instrument or, institutionally rendered, an administrative and organizational apparatus. In the latter case, technique assumed the sense of one-sided externality and an indifferent, neutral medium, passivity vis-à-vis the societal context in which it functions. (These meanings are just as powerfully operative, if anything even more so, in the bourgeois cultures of the West today as they were in early twentieth century Russia.) These senses, as unexamined, instrumentalist assumptions, had their basis in a specific Bolshevik tradition, that is, in the nineteenth century Russian Marxist assimilation of bourgeois theory (science) or, more precisely, in understanding Marxism as science. Assimilation of the ready-made, objectivistic underpinnings of bourgeois theory constituted the source of those fundamental conceptual mediations that, as the bloody Bolshevik defeat of the Kronstadters at the end of the Civil War dissolved massive pressure from below (crystallizing Bolshevik rule), were developed as an ideological defense of a practice of worker exploitation and societal domination.

The social relations of domination that have hardened into institutions functionally necessary to reproduction of the capitalist social order are misunderstood by Lenin as a thingly medium. In other words, the "administrative apparatus" is, for him, non-repressive because it is derived from the autonomous development of the productive forces of capitalism, and because this development prepares the foundation for a socialist society in which "all," that is, the overwhelming wage-earning majority of the population - armed and actively organized in its own self-defense, can carry out those tasks (namely, counting, registering, accounting and bookkeeping, all embedded in the activities of "finance" capital) which Lenin suggests would be involved in monitoring or supervising the accelerated development of productive forces once unfettered from capitalist ownership and control. Accordingly, this development would lead (on condition of actualization of certain measures such as the payment of an average working man's wages for remaining state functionaries) to a lengthy historical process of de-bureaucratization, and - resting on the material abundance it generated - it would provide the true foundation of a liberated society.

It is easy to see that Engels supplied Lenin with much of the theoretical framework for the dualistic concept of the state ("administrative" as well as repressive).³⁶⁵ This dualism is based on Engels' historically non-specific view of the state, that is, on his attempt to develop a scientized and objectivistic theory of human origins and formation on materialist foundations³⁶⁶ - one that included a prehistorical epoch in which an undivided community was ubiquitous, the productive forces-driven development of material surpluses, their stratification-generating appropriation and the concomitant formation of antagonistic classes in production, and, as a result, the creation of the state. Since Marx, on the other hand, explicitly elaborated a historically specific account of the development of the bourgeois state in France as a development stemming from the struggle of the middle classes against "feudal" social relations, it would seem much more difficult to find in him a basis - consistent with Engels - for this dualistic concept of the bourgeois state.

In *The Civil War in France*, Marx related that "the unity of the nation was not to be broken, but ... to become a reality by the destruction of the State power... While the merely repressive organs of the old government power were to be amputated, its legitimate functions were to be wrested from an authority usurping preeminence over society itself..."³⁶⁷ The contrast here is obvious, and it is nearly identical to the distinction in Engels between (repressive) "political authority" and "simple administrative functions," as well as corresponding closely to Lenin's distinction between repressive and administrative apparatuses. Yet in the latter case it is not identical: For Marx spoke of "*functions*," *that is, normal, characteristic if specialized activities that had not received any institutional embodiment*. In fact, the conceptual movement that embodies the entire description of the Commune undertaken by Marx militants against an institutional hardening of those "legitimate functions." The real movement that Marx described was one that was modeled biologically on a body reabsorbing back into itself its once malignant and now purified substances.³⁶⁸ It was

³⁶⁵"The political state, and with it political authority, will disappear as a result of the coming revolution, that is, public functions will lose their political character and be transformed into the simple administrative functions of watching over the true interests of society." Frederick Engels, "On Authority" (1873) in Marx and Engels, *Selected Works*, I. Moscow, 1958: 639. For the citation in Lenin, see *CW*, XXV, *The State and Revolution*, 442. Variations upon this passage can be found in Engels' *Socialism: Utopian and Scientific*. New York: 1974: 69-70, and in *Anti-Dühring: Herr Eugene Dühring's Revolution in Science*. Moscow, 1954: 389.

³⁶⁶i.e., *The Origin of the Family, Private Property and the State* or *Anti-Dühring*.

³⁶⁷MEGA, I/22 Werke, *Artike, Entwürfe. März bis November 1871*: 140-141.

The entire passage reads, "The unity of the nation was not to be broken, but to the contrary, to be organized by the Communal constitution, and to become a reality by the destruction of the State power which claimed to be the embodiment of that unity independent of, and superior to, the nation itself, from which it was but a parasitic excrescence. While the merely repressive organs of the old government power were to be amputated, its legitimate functions were to be wrested from an authority usurping preeminence over society itself, and restored to the responsible agents of society."

The original publication of this work was based on two English-language drafts and a presentation by Marx before the General Council of the International Working Men's Association in London. The drafts and text of his remarks as it appears in the MEGA are in English followed by a German translation.

³⁶⁸"The Communal Constitution would have *restored to the social body* all the forces hitherto absorbed by the *State parasite feeding upon, and clogging the free movement of, society*." *Ibid*, 141. "The Commune would have delivered the peasant of the *blood tax*...

not a movement in which a new "parasitic excrescence," or an another (bigger, better) reified and instrumentally grasped institution - in Lenin's terms an apparatus, appeared anew; rather, it was one in which all that is illusorily objective, all that falsely stands opposed and above, is overcome, i.e., dissolved with its legitimate functions reintegrated. This is a subtle but important difference. How, or where, did this difference originate?

In his *Imperialism*, Lenin outlined a popular presentation of the development of cartels, syndicates or trusts, that is, the development of capitalist "monopoly."

The combination of large and small capitalist firms into single gigantic, often vertically integrated enterprises was a tendential direction of capitalist development which Marx treated in terms of a practical logic that created concentration out of free competition. But, unlike the "monopolistic" reality of capitalism confronting Lenin, Marx never had to account for "monopoly" as an accomplished fact.

To boot, this accomplished fact was, at any rate, relative to specific national formations in the first place...

It was precisely the determinant, ubiquitous presence of financially capital-controlled concentrated and centralized industry in Russia and Germany that lay at the foundations of Lenin's dualistic concept of state functions and institutions. Unfortunately, real proletarian movement never traced out a revolutionary working class orientation toward these institutions from within them. In this regard, recall the role of bank employees in relations to the newly ascendant Bolshevik regime.

And how did Marx respond to the banking system?

"With respect to its formal organization and centralization, the banking system is altogether the most artificial and most developed product turned out by the capitalist mode of production... It presents indeed the form of universal bookkeeping and distribution of products on a social scale, but only the form... [The] social character of capital is organized and fully realized by the complete development of the credit and banking system. On the other hand this goes yet further: It places at the disposal of the industrial and commercial capitalists all the available, and even potential, capital of society, so far as it has not been actively invested, so that neither the lender nor the user of such capital are its real owners or producers. This forecloses on the private character of capital and itself implies, but only to that extent, the abolition of capital. On the basis of the banking system the distribution of capital as a special business, as a social function, is withdrawn from the hands of the private capitalist and usurers... At last [there] is no doubt the credit system will serve as a powerful lever during the transition from the capitalist mode of production to the production by means of associated labor..."³⁶⁹

Here Marx anticipated Lenin's analysis: The logic of presentation leads one to the banking system as a central component of a special apparatus that could be taken over "ready-made." It should be said this was written as part of a single draft eventually published as the third volume of *Capital*. The draft was written between 1863 and 1867. That is, it was written prior to the eruption into history of the Paris Commune. Did the novel insight based on the Communards' experience, that the "ready-made State machinery" cannot simply be taken over, render certain elements of the theory of capital "obsolete" (Lenin's term)? Marx, politically engaged and frequently ill, never addressed the question.

Note, however, first, the objectivistically compelling logic of commitments to bourgeois science (that is, to science on the model of modern science of nature, physical science so-called), and to the achievements of capitalist society as the basis of communism as well, make it extremely difficult to keep a firm hold on the analysis of the movement of capital as a seeming process without subjectivity, i.e., it is easy to lose sight of the hidden subject, and hard not to objectivistically read into highly evolved forms of capital's own movement developments that take capital beyond itself. In Marx, there is clearly a disjuncture between his historical and theoretical works, since the meaning and significance of proletarian creativity as reflectively grasped in the former did not always mediate analyses making up the latter. Second, the confrontation with the socially and geographically circumscribed, novel reality of finance-controlled, monopolized industrial capitals was one, an era in which dominant form of valorization has taken the shape of the extraction of relative surplus-value and in which capitalism has been reconstituted on these, its own

transformed his present *blood-suckers*, the notary, advocate, executor, and other judicial *vampires* into salaried communal agents, elected by, and responsible to himself." *Ibid*, 144. The "Commune was thus the true representative of all the *healthy* elements of French society." *Ibid*, 145. All emphases added.

³⁶⁹ Das Banksystem ist, der formellen Organisation und Centralisation nach..., das künstlichste und ausgebildetest Produkt, wozues die kapitalistische Produktionsweise überhaupt bringt... Es ist damit allerdings die F o r m einer allgemeinen Buchführung und Vertheilung der Produktionsmittel auf gesellschaftlicher Stufenleiter gegeben, aber auch nur die Form... [Der] gesellschaftliche Charakter des Kapitals wird erst vermittelt und vollauf verwirklicht durch volle Entwicklung des Kredit- und Banksystems. Andererseits geht dies weiter. Es stellt den industriellen und kommerziellen Kapitalisten alles disponible und selbst potentielle, nicht bereits aktiv engagierte Kapital der Gesellschaft zur Verfügung, sodaß weder der Verleiher noch der Anwender dieses Kapitals dessen Eigentümer oder Produzenten sind. Es hebt damit den Privatcharakter des Kapitals auf, und enthält so an sich, aber auch nur an sich, die Aufhebung des Kapitals selbst. Durch das Bankwesen ist die Vertheilung des Kapitals den Händen der Privatkapitalisten und Wucherer als ein besonderes Geschäft, als gesellschaftliche Funktion entzogen...

"Endlich unterliegt es keinem Zweifel, daß das Kreditsystem als ein mächtiger Hebel dienen wird, während des Uebergangs aus der kapitalistischen Produktionsweise in die Produktionsweise der associirten Arbeit." *MEGA III/15. Das Kapital. Kritik der politischen Ökonomie. Dritter Band: Der Gesamtprozess der kapitalistischen Produktion*, 36: 596.

foundations. It is in the twilight shadows of formal domination and the outset of real domination, an era in which labor-power leverage increasing scientific-technological inputs to production to multiply the mass of surplus-value extracted from it, that a novel working class historical reality took shape, a reality in which "real [proletarian] movement" began to split apart, that is, one in which the skilled and unskilled strata within the working class began to diverge in objective formation, life-chances, and objectively discernible trajectories.³⁷⁰ Bolshevik intentionality notwithstanding, it was this divergence which made the party organization of the Bolsheviks (not that of 1902, but the mass workers party circa 1917), if not necessary then, historically efficacious both in organizing the "conquest" of political power and in effectively appropriating finance-controlled monopolistic industry in order to restart, then accelerate expansion of productive forces, the *sine quo non* of bourgeois tasks in history,³⁷¹ which, in turn, perversely justified Lenin's theoretical analysis of "finance" capital.

³⁷⁰Circa 1900, the working class existed at two poles, a skilled worker elite and unskilled masses. The skilled stratum formed a thin layer and can be fruitfully contrasted to the mass of unskilled workers. The term "masses" is itself revealing: Taken over from classical physics, it refers to the undifferentiated level of skill, interchangeability within labor processes, and the numerical weight the characterized the unskilled proletariat. The "mass" of unskilled workers was invariably illiterate, and very poorly and irregularly paid. They included large numbers of children and women; were generally fresh from the countryside; and, having very recently broken with their serf, semi-serf or poor or landless peasant past, they found their ghettoized urban life both bewildering and intolerable. Dominated by a production process over which they had no control and of which they understood frightfully little, working long and exhausting hours, these "masses" were concentrated into "peripheral" industries, primarily into garment and textile factories known solely for their deplorable working conditions. The characterization of workers masses is as valid for immigrant southern Italians engaged in iron and later steel production in the Monongahela Valley as for Volga peasants laboring in the textile factories of St. Petersburg.

The skilled layer formed a vanguard, so that the Leninist party was not a vanguard party, but one based on class vanguards. These class vanguards, belonging to a historical era which has long since disappeared, consisted of the metalworking proletariat found primarily in munitions and armaments, military vehicles, engineering, and shipbuilding, a towering figure that dominated industrial production from the 1880s down to the conclusion of the first imperialist world war and just beyond it. This proletariat was the outstanding figure in all the advanced centers of capitalist production – St. Petersburg, Budapest and Vienna, Berlin and Hamburg, Turin, Paris, Glasgow and London, New York, Chicago and St. Louis – in the twilight of the era of formal domination.

In Tsarist Russia, for example, the distinction between the unskilled masses and a numerically small, worker elite ran quite deep, cut across the class, was a moment of the subjectivity of both strata, and even found expression in everyday speech: As we noted in an earlier post, skilled workers were employed in plants (*zavody*), while unskilled workplaces were referred to as factories (*fabriki*).

Skill was generally (i.e., not always, e.g., not in Tsarist Russia) developed in a craft-based context. Occupation itself was based upon a lengthy 5-7 year apprenticeship. Skilled workers possessed advanced education (e.g., fluency in 2-3 languages), and as a rule were extremely literate; they required technical training based on lengthy apprenticeship; and, it goes without saying, they were better and more regularly paid than the unskilled. Work was organized into a hierarchy of apprentice, journeyman, and foreman. This professional system was the other side of a high level of professionalism that characterized skilled workers as a social type. *A unique, subjective relation to the means of production was developed.* It entailed control over production technique, over methods of work and appropriate rhythms and motions of work, direct participation in the workplan, and unity of conception and execution. The worker was engaged in precision work, thoroughly well acquainted with his tools. If he no longer produced the final product, he still created something entirely new. This relation of control over means of production, technical training, and the unity of design and performance *insured both real control over and a grasp of the production process as a whole*, and, in a society in which all social relations are tendentially reduced to productive ones, this relation of control allowed the skilled worker to grasp, *in nuce*, the intelligible structure of society as a whole... The concept of "alienation" in production had no meaning here.

Worker skill, and with it the knowledge and understanding of production of society he might achieve, rested on a historically specific form of capitalist technology in production: Not fitted to any specific production schema, "universal" machines such as the prewar lathe and turret (the mastery of which in machining objects took years to develop) formed the material premise of craft mobility and knowledge. While the struggle for control at the point of production between skilled workers and capitalists was ongoing (and decidedly favored skilled workers), the world war irrevocably altered this relation by transforming capitalist technology in production itself.

³⁷¹We do not take the concept of bourgeois tasks in history (driven by the logic of capital, endless expansion of productive forces) for granted. To do so, is tantamount to becoming hopelessly mired in teleological, 19th century and uncritically Marxist thought. For *our* validation of the concept, see *The Critique of Science*, the Introduction as a whole, and the Preliminary Conclusions; and, as well, *Capitalism and the Domination of Nature*, Part II, "Capital and the Dynamics of its Development," while the concept of "bourgeois tasks" and *the reality to which it refers back* (though the term is never mentioned) is systematically developed.

*Injection of the State into Capital's Circuits and the Historical Shift from
Productive Investment to Speculate Finance
Volume III, Chapters 29-33
Their Significance in Contemporary Perspective*

Here we intend to put Marx aside, or rather approach him through the lenses of contemporary events which the theoretical framework of *Capital* with respect to finance crises, while appearing historically circumscribed by the reasonable chronologically mid-nineteenth century assumption of gold as the basis of currency exchanges (i.e., by lack of consideration of the runaway development of credit on the basis of fiat money), still remains qualitatively superior as a theoretical framework to all bourgeois theorizations of the relation of credit to crises.

Part I

Injection of the State into Capital's Circuits

Brief Remarks on the Theory of the Modern Bourgeois State

The state is the arena in which otherwise competing capitals forge a precarious unity, that is class unity among different social groups who, variously situated within the processes of production and circulation, in forging that unity form a hierarchically organized, internally antagonistic ruling class.

In its historically canonized (not to mention ideological) form of parliamentary democracy, this unity is worked out by, and constantly renewed in and through the activity of, a narrow stratum formed from out of these (ruling class) social groups or the institutions they control (e.g., legislature above all, education, military): The leading elements of that stratum are bourgeois politicians, but it, the stratum, also includes civil bureaucrats, managers and administrators within state agencies and, not formally part of the state structure, the intellectuals who man its universities, research institutes, etc. Unity is constituted in the manifold committees, agencies and apparatuses of the state, broadly, in its executive and legislative institutions. It is built up authoritatively (by command), discursively and deliberatively (in exchanges and discussion).

The modern state, like science, first emerged in the West as a political form embodying the class unity of the bourgeoisie in its struggle against the old feudal order. Only here did it constitute itself as a monstrosity that rose on the back of pre-existing communities that had encompassed forms of family, sociality, and production. The modern state is unique in its institutional and separate character, its appearance as a "public" force clothed in a sham objectivity that sets it apart from and over and against individuals and society, its alien otherness that masks its reality as an complex network of hardened social relations governed by the class teleology of the bourgeoisie and actually borne by individuals (themselves bourgeois) whose daily activities reproduce it as such. While any modern, bourgeois state may come in the short run to be identified with a specific historical personage, what distinguishes it from states that appear in other past epochs is a seeming efficacy, permanence and reality that render it at once objectively independent in relation to society and independent of any specific ruler.³⁷²

The specific institutional functions of the bourgeois state can be distinguished from the historically constituted character of this state as such. In so doing, we must not fail to recognize that this, as any, state essentially concentrates armed force: No matter what change of forms the state may undergo, the institutions of coercion, and the monopoly of practical violence in society such institutions necessarily entail, remain. Because the specific forms of the historically constituted features of repression are distinct but not practically (only ideally, i.e., reflectively and analytically) separable from the similarly, specifically formed, institutional functions of capital's state with which they are intertwined (since their shapes depend upon the historically achieved level of production, and the specific balance and relation of class forces within and without the society of capital in question), the most seemingly "neutral," institutionalized functions of capital's state (such as, say, not only the regulation of currency by a national bank but the institution itself) transmit and reproduce repressive class relations. Thus, for instance, the regulation of the currency expresses, reproduces and reinforces the social power of financial capital; while the institution of a national bank concentrates, centralizes, and crystallizes the same capital's power over proletarian daily life. Accordingly, the institutions of capital's state are not functionally neutral, merely regulatory administrative bodies. Each and all congeal social relations of bourgeois domination. Those historically constituted, institutionalized functions the capital's state minimally fulfills, beginning with the era inaugurated by imperialist world war, are: The state, first, guarantees, violently if necessary, the legal and organizational principles of capital's movement that, second, it legislatively and executively constructs. Third, it is the guardian and promoter of mass loyalty to capitalist system and bourgeois society as a whole. Fourth, the state regulates labor and capital relations, and structures them to systematically favor

³⁷²For precapitalist forms of socialization, states are indistinguishable from the persons and entourages of the ruler. Even where the ruler's armed force consists in an army, his nascent bureaucracy in priests or tax collectors, this armed force and these minions, though employed in enforcing domination over the rest of the community, are not institutionally separable from the ruler but instead form his personal entourage or his household. The state itself has yet to constitute a distinct sphere separate from the totality of social relations of which it is a part. Only with the rise of a centralized, bureaucratized form in the bourgeois era has the state achieved an objective, institutional existence.

itself as capital, in order to avoid disruption of production and social crises that might otherwise threaten its and, generally, bourgeois society's legitimacy. Fifth, it protects itself, i.e., its capitalists (or at least its core capitals) against foreign competition. Sixth, the state constructs some of the material presuppositions of capital's movement, especially infrastructure such as highways, rails, canals and hydroelectric plants, and institutions of financial regulation such as a central bank, which are beyond the capacity of any single capital. These institutional functions of the state are carried out legislatively, executively, or both depending upon its specific political form by men who do so precisely because they are capital's representatives, personifications of capital, products of the realization of capitalist principles in the domain of state activity. In a dialectically circular way, as carriers of capital's "culture," their activity guarantees the state is bourgeois, is capital's state.

Since the end of the last imperialist world war, a depth-structural infrastructure of the state in its historically essential character as the institutional monopoly of armed force has come into being. This infrastructure multiplies that force, and vastly enlarges and broadens its deployment. This infrastructure goes beyond anything envisioned in classical theories of state as the institution of institution quintessentially devoted to repression. It is constituted as a dense network of intelligence agencies, military and policing forces that underpin the bourgeois state in its open, "democratic," "representative" and, or, "liberal" aspect, supporting the latter's strategic objectives and actively carrying out its goals through alegal, illegal and extralegal means deploying covert personnel within its own organizations (army, navy, air force, etc.), "freelance, private sector" employees and "auxiliary" forces by and large recruited among mercenaries, often its own former soldiery, across the world. There should be no mistaken the rootedness of the deep state in the soil of the capitalist totality: In the United States, the workplaces and institutions of the infrastructure undergirding this armed force in depth employs roughly 4 million people including upwards 70% "private" contractors in some spheres of activity.³⁷³ The activities of this infrastructural underpinning of armed force is funded through monies that are appropriated by the official state legislatures with no determination as to how, on what or where the funds will be spent, or knowledge of what actions are to be executed, how they will be executed or where they will be executed.³⁷⁴

While secrecy governs much of this activity, it is not entirely invisible. Construction of weaponry such as a spy satellite, a stealth airplane, etc., requires an enormous array of dummy front companies and sensuous-material infrastructure, factories, airports, hangars and runways, laboratories, testing and launch facilities, buildings housing global networking rooms forming the backbone of data and surveillance centers and consisting in computers, sets of servers, on-board batteries and chillers (not to mention the personnel involved from nuclear physicists to machinists, from test pilots to computer programmers, and not to mention the for-most-part open, world power sources from pipelines carrying various types of petroleum to the electrical grid and the coal-fired power plants, nuclear facilities and hydroelectric dams that support it).

This infrastructure underpinning armed force first formed in the aftermath of the last imperialist world war. One might think that at bottom it first emerged as a defensive formation designed to beat back challenges to the capitalist state in periods of crisis, political, financial and economic (where these terms were meaningfully distinct), in which case it might have immediately appeared as a domestic institution. Not only, in fact, it is the order of capital (and the system of states which operate within) that the deep state defends, but the primarily arena in which it operates is international. And while "defending capital" appears as its purpose, the practices of its agents are indistinguishable from augmenting capital, from expanding its reach territorially and intensifying its penetration both socially (institutionally) and individually (penetration and reshaping individual psyches), not through open, advertised forms of intrusion but through vicious, brutal and extralegal forms such as torture and murder.

At this moment, the deep state constitute the substructure of a novel totalitarian political form that has little precedent, even in literary and filmic, near future dystopian fiction. While its genesis and formation of has in the past largely had its own logic, since that moment at which the various elements constituting the last nodal point in its evolution coalesced (2001-2002), culminating in the Lehman bankruptcy (September 2008) and the ensuing financial collapse the crisis of capital, the logic of its, capital's, movement has accelerated and now largely drives the development of the infrastructure underpinning this armed force in depth. Moreover, during the course of the past four and half decades, capital's movement has generated a growing globally manifest, class polarization, one in which a continuously expanding proletarianized humanity and its resistance in multitudinous forms confronts capital's personifications, decidedly financial in nature, and their adjuncts, ideologues and apologists largely housed in the state and the media spectacle, and found among the intelligentsia (academia, think tanks) and smaller layers of propertyholders. Those forms of resistance are greatly varied (though they increasingly appear to unfold around a single type, the riot), but should they ever rise to the level of a thoroughgoing challenge to the order of capital, its destruction will entail more than simple dismantling classical state organs, the courts, prosecutors and police, division

³⁷³Trevor Paglen, *Black Spots on the Map: The Dark Geography of the Pentagon's Secret World*. New York, 2009: 4. In official capacities, the US state at the national level employs 1.8 million people. *Ibid*.

³⁷⁴In the United States, that budget is enormous: In 2009, it consisted in roughly 60 billion \$US. Joe Masco, "Militarization of Territorial Planning in Cold War USA." Accessed online (video).

of the army, and formation of a new form of power embedded in and immediately and directly responsible to the mass of the exploited and oppressed. The enormous expansion of this largely hidden armed force in depth insures that no matter how widespread, generalized and popular revolutionary transformation might be, civil war will ensue.

The Slump

Integration of "State" and "Economy," i.e., Incorporation of the State into Circuits of Capital

Transpiring between two world wars, the concentrated expression of a general crisis of the world system of capitalist social relations, the Slump, otherwise known as the Great Depression, had nodal points where the crisis was deepest, in Germany, the United States and Britain.

The general crisis broke out as accumulation hit an impasse. It was most manifest in the collapse, or near collapse, of capitalist production. Responses varied from country to country. The most dramatic, and most important, transpired in Germany and the United States. In Germany, the crisis vastly accelerated development of a mass fascist movement based on the *Mittelstand*, a movement whose leadership in seizing power eliminated, murdered, the most militant layers of the working class (communists, socialists and outspoken union militants), drove down working class living standards far below reproductive costs, and pursued deep incursions of a *dirigist* state into the circuits of capital, thereby opening up possibility of restarting accumulation as a central dimension of a mad project of extensive genocides and global military dominance. In the United States, it was the political Executive that assumed a ruling class vanguard role in combating the Slump. Taken together, several pieces of legislation forged both during the Roosevelt Administration's first "Hundred Days," and during the period known as the "second New Deal" (primarily 1935), fully launched and irreversibly committed the state to its integration with the economy by establishing institutions in and over it. Effectively and historically, both states, acting a representative of their greatest national capitals, girded themselves for interimperialist competition of the most desperate and violent sought in the arena of the world, total war, each offering a different model of capitalist hegemony as an aftermath to assumed victory. Through enormous devalorizing destruction of objective substance (plant, equipment, industrial landscapes, entire cities), the conclusion of the last imperialist world war brought an end to the general crisis. Following upon a military Keynesian-based recovery, which itself created a massive structural limit, albeit *temporary* in the historical sense, on the severity of future contraction, it was the Americans who emerged hegemonic and whose model organized the postwar world.

We can review the central features of the US mode of incorporating the state into the circuits of capital.

The core legislation, and its role in putting a floor on downturns and facilitating integration, included the Agricultural Adjustment Act (May 1933), Emergency Farm Mortgage Act (May 1933), and the Farm Credit Act (June 1933). This legislation established an institutionally-based national agricultural policy that took farm produced commodities (grain, livestock, etc.) off the market thereby putting a brake on the overproduction that had drastically deflated agricultural prices; provided relief to farmers in the form of low interest mortgages, refinancing and second mortgages; and, made provision for reorganizing agricultural credit activities. The Emergency Banking Act (March 1933), Truth-in-Securities Act (May 1933), Glass-Steagall Banking Act (June 1933), and the Banking Act of 1935 closed banks (six days in March 1933) establishing a precedent and policy of federal intervention in internal banking operations (effectively judging viability through a system of licenses and "conservators"), gave the President authority to control gold export, provided financial assistance to banks, and provided the Federal Reserve Board with the power to, first, issue paper money, greenbacks, against currency and gold, and, second, change the ratio between dollar reserves and deposit in member banks. This legislation also established federal scrutiny of corporate public securities; institutionally separated commercial banking from their securities affiliates and divorced investment banks from their deposit business, and added a federal guarantee of bank deposits (Federal Deposit Insurance) while compelling banks so secured to join the Federal Reserve System; and, it lodged control of the money supply in a committee appointed by the Federal Reserve Board, thus centralizing this control in Washington, DC and making it possible, perhaps facile, for the national government to undertake deficit spending by way of pushing securities off on banks. The Wagner Act (August 1935) followed shortly upon a US Supreme Court decision that ruled the National Industrial Recovery Act of 1933, and with it the famous section 7(a) as it applied to collective bargaining, unconstitutional. The Act gave a newly appointed National Labor Relations Board the authority to call elections for employee representation in workplaces, prohibited employer coercion or restraint, required management to deal with the election-determined, representative of the majority of employees, and, provided the Board with the machinery (modeled on the Federal Trade Commission) to enforce its decisions. The Social Security Act (August 1935) mandated creation of a national pension fund based on compulsory contributions from, a tax on, employee payrolls and on employers (as opposed to creation through general revenues). Beyond this old age assistance and insurance, it also provided in this context for specialized types of public assistance for those already on or qualified for relief such as the currently aged (Survivor's Insurance), the blind, and dependent children (Aid to Dependent Children greatly expanded in 1939). The Act also set up a states-based, patchwork network (lacking a uniform national standard) of unemployment and workman's compensations.

The Slump was precipitated by a financial panic, but, systemically, in terms of the network of capitalist social relations on a global scale, it developed as a consequence of a crisis of agricultural overproduction, specifically that of wheat. New Deal legislation was designed to address these systemic problems. First, the Agricultural Adjustment Act took commodities produced on American farms off the market: It eliminated the excess agricultural commodities in the most productive sector of the world farm economy as structural elements in the constitution of a boom-bust cycle, and rendered the determination of farm produce prices a matter of state policy (by way of subsidy). Second, the series of banking acts detailed above restored confidence in the American banking system by setting a precedent in which the state with its vast monetary resources generated through revenue extraction from the underlying populace would come to the rescue of bankers anytime speculative behavior threatened the financial system and currency solvency. Beyond this, the Roosevelt Administration utilized the same power to guarantee deposits generally, subordinated, in part, the movement of financial capital to state oversight and regulation, structurally put an institutional barrier (Glass-Steagall) against the most egregious forms of speculative financial activity, and took control of the currency (thereby allowing the state to micromanage currency movements). Third, the Emergency Farm Mortgage Act and the Home Owners' Loan Act of June 1933, making available low interest refinancing of masses of largely middle stratum homeowners (who, in payment default, were threatened with foreclosure). Fourth, the Wagner Act and the Social Security Act taken together, first, assured that socially powerful groups (farmers, and especially workers) would not be needlessly driven to open revolt, and, second, by allowing wages to rise, incorporated groups and strata, especially those of the industrial proletariat, previously outside the domain of the reproduction of capital (here, consumption), into this cycle and thereby provided the needed demand to permit the system of social relations to reproduce itself.

If in response to the general crisis (interimperialist world war, the Slump, and renewed war), capital's personifications thus undertook to integrate its state and economy. The bourgeois state and the capitalist economy began to mutually implicate and penetrate one another. Functionally, this relation can, today, no longer be comprehended in terms of intervention of the former, say through infrastructural improvements, in the movement of the latter. Capital's state no longer merely "intervenes" in the economy, since the actual movement of capital no longer *appears* to autonomously regulate society *at the national level*... Though complexly mediated, the "law" of value continues to operate at the level of the world, and while the state still provides some barriers to its determination, though the weaker the state the less, for over the past forty years the immense rationalization of capitalism has vastly enhanced the weight of its global structure as the relentless pressure of capital itself is increasingly and dramatically felt at each and every site of production and consumption across the world... With respect, then, to those barriers the state cannot be comprehended in terms of activities that devolve on monitoring capitalist firms, activities that may result in the production of standards and leads to a practice of subjecting business operators to periodic inspections. Nor can the relation of state to capital be comprehended in terms of the concept of a mixed economy, (i.e., a unity of nationalized, state operated and privately owned enterprises). A mixed economy exhibits intervention at its extreme, the case of statization, "public" ownership or nationalization where the state salvages and operates private firms that would otherwise collapse due to market competition. In this case, the state has intervened in order to secure stability, since the judgment of the dominant, Executive-controlling faction of capital is that loss of the particular firm in question would incur the risk of macroeconomic instability or social unrest. Among the most powerful states operates as national capitals in the international arena, the state has ordered its activities on the other side of intervention: To secure capital's expanded reproduction, beyond management of domestic agricultural prices and surpluses, control of private banking and currency movements and a minimalist social safety net for the popular classes (all of which are integral moments of this integration), it has come to systematically direct economic development, first and foremost, through Keynesian-styled, nonproductive military expenditures and, second, through the dispersal of enormous sums of monies, grants and contracts to targeted private sector firms, effectively creating "industrial policy." This policy decides allocation of the bulk of societal research and development, determines which categories of industries are to be at the "cutting edge" of technological development, and thereby shapes classes that are to be the beneficiaries of that development. Here, it is core bourgeois state institutional practices that form industrial production processes, that, in turn, form social groups and classes (for example, small owners and the dependent middle stratum layers engaged in engineering in the aerospace as well as the same social layers in telecommunications and biotechnology), who are existentially dependent upon such state policies. The stability of the integration of state and capital depends upon sustained, high level and continuously growing, nonproductive military expenditures. The condition for this stability has been the suspension of competition between national capitals demanded by overarching military unity in the confrontation with the bourgeoisie's nightmare (at once a poor joke and a bad dream), the historical "alternative" of actually existing communism, i.e., state capitalism. The collapse of Soviet power undid mutual antagonisms and recreated once again the dynamic of interimperialist rivalry which governs the movement of capital on a world-scale.

Part II

From Productive Investment to Speculative Finance

To this point, the banking system played only a secondary role in capital's confrontation with its own contradictory movement and, in an objectivistic sense, the crisis which necessarily ensued.

To really understand the role of the central bank, as in recent years it has not only become increasingly significant but has played the preponderate role in shaping the direction of capitalist development, it will be necessary to begin with a theoretical reflection, that is, with a general statement of the role and significance of banking, specifically with a view to credit, in capital accumulation. This reflection, it should go without saying, arises from social and historical contents, from long pondering banking, finance and their development under specifically capitalist conditions. And, it should also go without saying, that we personally are a latecomer to these reflections owing a much to others who have devoted a great deal of time and effort to bringing this reflection to fruition.

There are two reasons why banking and credit are necessary to capital accumulation. First, in the broadest sense, at a certain point in the development of capitalism as real domination the vast scale of operations, the massive investments in constant capital particularly its fixed component and the enormous amounts of money-capital required to conduct not just day-to-day operations but to reach forward and bring the near future into the present as individual capitals *plan* their expansion, all require immediate access to very large sums of money-capital which for the individual capital (capitalist, enterprise, corporation) simply are not in that immediate way generated by, hence available to, its operations. Second, money-capital based on commodity-money (and in a real historical sense only gold has served this function)³⁷⁵ is finite and, to boot, it is relatively inelastic and not adaptable with a view to the up and down swings in commodity production and its output. Unlike credit extended verbally as a promise in a face-to-face encounter, or transmitted (in any case whether or not it is codified in a document) by telegraph, by phone or digitally, the sheer sensuous-material reality of a money-commodity is problematic. But the crux is that capital accumulation is an infinite entropic process,³⁷⁶ and without credit accumulation would grind to a halt - sites of production would shutter, trade will plummet abysmally and soon, very soon, the entire system of reified social relations, the capitalist economy, would shut down.

The question, for us today, is, "Why have banking, financial institutions of all sorts and credit assumed the preponderate role in shaping the direction of capitalist development?" The answer is relatively straightforward: At least in the old capitalist metropolises, financial speculation has become vastly more profitable than productive investment. This raises another question, "Why?" The answer here too is straightforward: In the once dynamic center(s) of capital accumulation at the level of the world, as financial speculation took off the rate of profit across the industrial sector had been falling for close to two decades. Tracing out the historical development in and through this occurred will bring us to fiat money. At this point, it may not help a whole lot to go back to Marx.³⁷⁷ Instead, we must return to those moments (there have been two), and the development which has transpired between them, when, from the

³⁷⁵Silver's service as commodity capital belongs to the epoch of capital's formal domination, especially to the high era of Castilian supremacy, i.e., 1525-1640. Perhaps more importantly silver did not mediate a relation to paper money but was itself directly money as coin, thus at once commodity-money and money-capital.

³⁷⁶No one any longer doubts this, at least the endlessly expansive character of capital accumulation. Ranging from the idiot-airhead media spectacular presenter to the academic economist, even bourgeois ideologues of every persuasion glibly speak of unlimited economic growth. As for its entropic character, see the *Coda*, below.

³⁷⁷Here we fully concur with David Harvey's assessment: "There is rapid deterioration in the quality of Marx's text on the role of credit in relation to capital after chapter 28." *A Companion to Marx's Capital*, Vol. II, 207.

One need not take our word for it. A comparison of Marx's manuscripts drafted for the third volume of *Capital* (MEGA II/4.2. *Ökonomische Manuskripte 1863-1867. Teil 2. Manuskript 1863/65 zum 3. Buch des „Kapital“*) with the final text for the same (MEGA II/15. *Das Kapital. Kritik der politischen Ökonomie. Dritter Band: Der Gesamtprozess der kapitalistischen Produktion.*) prepared and edited by Engels will bear out this assessment.

Here we shall also pause to consider major sectors of the global industrial economy wherein surplus-value might and should be generated, but consider them with a view to organic composition of capitals in order that we can arrive at a historical specific sense of why capital has deserted productive for speculative investment in large parts of the global economy.

Those sectors are auto, pharmaceuticals, (industrialized) agriculture, electronic components, and apparel including footwear. Autos factories on the older continuous flow production model are largely robotized employing an order of magnitude less labor-power than during the Fordist era, pharmaceutical production is completely automated and formula for drugs and vaccines depend on scientific labor (laboratory teams pursuing "research," little of which is waged), and globally significance agriculture (wheat, soybeans, maize, etc.) is highly mechanized with labor-power in a situation similar to autos. All have exceedingly high organic composition of capitals, all are dominated by international capitals which at this level (that of the world) are highly competitive and operate with low rates of profit. Electronic components production (e.g., as auto components, as consumer electronic components, such as semi-conductors) has large-scale capital investments in machinery, is internationally highly competitive and employs a large mass of labor-power labor (which is low-waged and unbenefited making for a better ratio, $s/c+v$), while apparel (especially clothing and shoes, above all, tennis shoes) both deploy technologies that are old and employs a large mass of cheap labor-power, thus relative low organic composition of capitals obtain while the surpluses generated are controlled by large retail capitals making the latter highly profitable.

In all sectors but apparel we find profitably far below levels achieved in speculative finance, which is why so much of auto production is subjected to protectionist measures, and why pharmaceutical and industrial agriculture are heavily subsidized by states, the former additionally exercising state-sanctioned monopolies in domestic markets.

standpoint of the global hegemon, the limits of capitalist development became manifest. The first occurred in August 1971, the second began to unfold in September 2008. As we shall see, the development in question here is not simply, not at all, one of an unfolding necessary dynamic of capitalism. Historical contingency in the form of the balance and relation of class forces enters into it in a decided way, and class struggle if only in a mediated manner. Begin with August 1971.

August 1971

After 1966, funded out of existing tax revenues, the rising costs of the war in Indochina not only cut into monies otherwise allotted to domestic programs (Lyndon Johnson, and Richard Nixon after him, refused to propose tax increases to the US Congress for fear of feeding the growing antiwar movement at home), but were borne by US allies wherever American soldiers were stationed. We are not referring to Vietnam (or Japan and Korea) here, but Britain, Germany, Italy and Greece. American soldiers formed a large foreign presence in Europe, the dollar was highly overvalued meaning British, German, etc goods and services were, relatively speaking, cheap (in 1968, the German mark traded at 4:1 to the dollar), and US troops spent freely, very much beyond necessities, say on personal entertainment. A large pool of dollars, even derisively named Eurodollars, had begun to accumulate in Europe prior to Nixon's first term election. Had the Europeans no other recourse this would have been dangerously inflationary (i.e., the US was exporting its inflation); but historically the various European (including the British) central banks had recycled dollars by exchanging it for gold. They continued to do so, only now at an accelerated pace. By 1970 US reserves were dwindling, and by summer 1971, with no end to the war and a general demobilization in sight, their disappearance could be foreseen. On 15 August 1971, Richard Nixon suspended all dollar for gold exchanges, effectively (and, as it turned out, permanently) closing the gold window. Masked by the military Keynesian "multiplier effects" of wartime spending, the postwar boom had ended no later than 1968; the closure of the gold window made it official for, among other things, in ending the system of fixed exchange rates backed by gold for the world's major currencies, it meant the 1944 Bretton-Woods Agreement was a dead letter. But there was more at issue here, far more.

Forward and Backward (In-Between)

From Gold Standard through Fiat Money to Financial Crisis Overlaying Class Conflict, Struggle and Recomposition

First, and we shall return to this latter, declining since at least 1968 a falling rate of profit among the great industrial capitals in the United States reaches back to this event which first exhibited it. Beginning at the end of 1940s, capitalist development in Europe, i.e., Germany, the Netherlands, Belgium, France and Italy, and in East Asia had been on the upswing: Economies rebuild on the most technologically advanced foundations, Japanese and German capitals in particular, were poised to assume the role of internationally competitive regional hegemonies. Lacking a natural resource base in a vast East Asian hinterland, Korea, Taiwan, Hong Kong, and perhaps Singapore also had, nonetheless, emerged as economic dynamos (the so-called "new industrializing countries" of the eighties), and were producing for mass consumption, commodities for export to the old capitalist metropolises in the West. In core heavy industrial sectors and their auxiliaries (steel, foundries, tool and dye, machine production) and then in high "value added" durable goods also (above all, autos), the US, with its now antiquated industrial base, had lost its competitive advantage. This was not just a question of a myopic failure of US industrial capitalists to invest in productively innovative technologies. Examine the competitive advantages that accrued to the US as a national capital in the immediate aftermath of the last imperialist world war: US global capitalist hegemony rested on, first, advanced organization of the labor processes (continuous flow production generalized across all industries) and world productivity leadership; second, the status of the dollar as the single acceptable currency for market transactions in the private capitalist world (Bretton-Woods); and, third, domination of world oil production which assured cheap oil and gasoline fuels making the otherwise vast costs associated with the operation of large plants and transportation between geographically diverse operations cost-effective. Because the liberal democratic and dominant wing of the US ruling class had pursued an effectively Keynesian solution to the general crisis in the face of the Slump, these advantages were created by incorporating working class consumption into the dynamics of the system of social relations, as its "motor," and thus, a powerful reformist union movement had been built both by dint of worker activity and, seizing on the support offered here in order to beat back recalcitrant capitalist resistance, with the connivance of the state as the concentrated power of capital (above all, the 1935 Wagner Act with its creation of a National Labor Relations Board mandating state sanctioned organizing and union presence in firms). At its height in 1957, 34% of the US private sector proletariat was unionized, and this unionization was concentrated in the core mass production industries especially in auto, steel, rubber, electrical equipment, meatpacking and coal mining, transportation and communications, the building trades and (from the last imperialist world war onward) in the defense industries. This was simply enormous power which the national union leaderships could leverage, far too much for the large industrial capitals even as international operators. In leveraging it through master contracts unions committed these capitals to

higher wages and generous benefit packages, all of which constituted restrictions on the amounts of surplus-value they, the capitals, could extract. Significantly, it also placed constraints on technical innovation.³⁷⁸

The first line of capital's defense was to relocate to, and build new plant in, the open shop US South and Southwest in the 1950s. Yet this strategy still rested on postwar global supremacy, largely because the bulk of operations in the core Fordist industries remained in the East and particularly the Midwest. (It was only the defense industries which pursued this strategy successfully.) So, in the end, the great industrial capital accepted high wages and excellent benefit packages, but only on assumption of continuing competitive advantage globally.

Imperialist aggression and war in Indochina really and clearly exhibited for the first time that this assumption no longer held: US defense contractors were unable to keep up with American military demand for weaponry and its accompaniment of all sorts (artillery, tanks and shells, cargo and fighter planes, missiles, helicopters, PT boats, automatic pistols and machine guns, and ammunition of various kinds). The problem was US steel manufacturer. It could not keep up with that demand. With Pentagon approval, defense contractors purchased steel abroad, from Japan and Korea. American steel producers deployed the most recently developed but still antiquated open hearth furnaces, which could produce a ton of galvanized steel in 6 man hours of labor. Starting from postwar technical advances, Japanese and Korean steel producers deployed oxygen burning furnaces that produced a ton of the same steel in 4.5 man hours (thus, with 1/3 more productive capacity had more than the wherewith to meet additional demand). By 1975, Japanese and Korean steel producers had a permanent and growing foothold in the US market, at this point capturing not less than 10% of it. At this moment, automobiles were large made of steel bodies, with generous amounts of steel in the drive train (engine, transmission, axles). And at this moment, Japanese autos (Toyota, Datsun later Nissan, and Honda) followed steel with cheaper car prices achieving significant market share by 1980. But this was not all: Machine tooling and tool and dye manufacturing were primarily based on steel. So lasting from approximately 1968-1979, the first phase of US "de-industrialization" saw the collapse of industries (e.g., machine tools) engaged in the manufacture of the means of production and related raw materials producers (e.g., steel).³⁷⁹ Most of these jobs were lost, not to automation or attrition, but to foreign capitalists who were more

³⁷⁸In this respect in the postwar era, the key development was the institutionalization of a step-by-step grievance procedure. Effectively, and by design (since it included as a final step strike barring arbitration), the procedure kept production rolling, thereby leaving, it should be noted, management, capital's, power intact.

The effect of the grievance procedure was to shift power away from the shopfloor toward union leaderships, and not merely the bargaining unit or union local but the national leaderships. It put an end to the alternative, informal practices, face-to-face confrontations between stewards and foremen or supervisors, that demanded the presence of the steward and, almost invariably, led to stoppage of the production line. The situation had, obviously, been the source of the steward's power, including the power of disciplining workers when an issue was, in fact, settled.

Instead, the grievance procedure pushed power upward, and, as it came to pass, the steward system was incorporated into the contract (giving capital, it should be noted, the right to bargain over union representation, the number and authority, if not the personages, of the representatives).

Grievance procedure, wage and benefit patterns, and an elaborate contract language were developed by union leaderships and embodied in patterned, national contracts, otherwise known as master contracts. It was the force of state intervention (through the agencies such as the NLRB) that assured something like a master contract would be the outcome of collective bargaining during the war, since it was the most effective means (i.e., quickest) from the state's standpoint of overcoming potential disruptions to production in the life and death struggle among warring imperialist powers to produce armaments of all sorts.

It was in the largest industrial unions, the "big battalions" (auto, steel, rubber, electrical equipment, meatpacking and coal mining) wherein pattern bargaining was established and evolved. A similar situation prevailed in freight and telecommunications with the largest, productively crucial (hence, powerful) unions, the Teamsters and Communications Workers of America.

³⁷⁹In 1970, the steel industries in the United States employed about 600,000 workers; before 1990, that had dropped to 250,000; by 2012, they employed 75,000 - 80,000 roughly the same number as today.

In the late sixties, eastern Wisconsin from Kenosha in the south, north through Milwaukee and up the Fox River Valley to Green Bay was as industrially concentrated region as any in the world: "In 1969, the entire eastern length of the state from Racine to Green Bay was heavily industrialized. In Kenosha, American Brass, Simmons Bedding, Samuel Lowe publishing, MacWhyte Wire Rope had manufacturing facilities, while American Motors had a large auto complex. In Milwaukee, manufacturing centered on Briggs and Stratton, Allis Chalmers, Harley-Davidson and A.O. Smith, while numerous tool and dye and machine shops dotted the industrial landscape. North along old US Hwy 41, Fond du lac and Oshkosh, possessing a large shoe and a large clothing manufacturer, were characterized by countless foundries and machine shops that were oriented still further north, servicing the largest concentration of paper mills in the world, names like Kimberly Clark, Fort Howard and Charmin, some nineteen along a 26 mile stretch from Appleton to Green Bay that employed upward 90,000 workers.

From the small shops to the big concerns, the vast overwhelming majority of the industrial workers were unionized. Today, in Kenosha, all these manufacturers and a half dozen large industrial firms not mentioned here are gone, some simply disappearing. In Milwaukee, manufacturing agricultural equipment (tractors and mechanized farm implements), hydroturbines, compressors, electric motors, air purification and coal gasification machinery, valves and pumps, Allis Chalmers struggled with the downturn in the farm economy in the early eighties, sold off its agricultural division to Klockner-Humboldt-Deutz and its electrical control equipment to Siemens, and collapsed in 1985. Once the largest producer of automotive frames in the world (in north Milwaukee, operating inventory, stacks of auto frames six to eight high, were once crammed into a triangular area equivalent of three square city blocks), A.O. Smith has had to reinvent itself as a vastly smaller firm. Briggs and Stratton and Harley have survived, greatly downsized. In Milwaukee, Fond du lac and Oshkosh, the tool and dye stamping facilities, machine shops and foundries are gone. And, in the Fox

competitive because they started with qualitatively more modernized plant and equipment together with a very low waged labor (variable capital) component of production costs. Return to commodity-money (gold), a falling rate of profit and fiat money. Second, closure of the gold window established a measure of currencies as "stores of value" in terms of... other currencies. By 1976, it was understood by leading capitals that the most advanced sectors of the world economy were being hammered by competition amongst themselves, that, taken together with high organic compositions of capital, led to that falling rate of profit. Yet through 1981, the major fight for capitalist stability especially in the United States was against inflation; and until 1980, the balance of payments between nations constituting global trade was settled in gold at the end of each year. Since then, however, those balances have been settled as credits, i.e., in I.O.U.s (a development achieved by the United States through its control of the Bank of International Settlements). A second phase of "de-industrialization" followed. It, largely coinciding with the years (1981-1988) of the Reagan presidency, was defined by a state sponsored and led employers' offensive against organized labor (PATCO firings by Reagan in 1982, the losses at Dodge-Phelps, Hormel and Eastern Airlines in the mid-1980s) and by benefits cuts, wage decreases and additional capitalist control over production norms consequent upon organized worker losses in each and all of these struggle. Nonetheless, most great capitals were not willing to engage in a costly, and risky, struggle against organized and desperate workers especially when weighed against the lure of "dirt cheap" labor abroad in the face of a rate of profit that had been continually falling since 1965.³⁸⁰ It was at this point that financialization of the economy began its explosion, as capitalist hoards, a normal part of accumulation as Marx states,³⁸¹ were poured both into investments abroad and into financial speculation, especially into real estate, insurance and entertainment all activities with very low variable capital and substantially smaller constant capital components.³⁸² From 1950 to 2005, the diversion of investment from manufacturing, transportation and communications, spheres of the creation of surplus-value, to state spending on military and policing, and in the latter half of this period to real estate, insurance and entertainment not to mention advertising and marketing, played a role (secondary) together with a rising organic composition of capital (primary) in a falling rate of profit across the entire economy.³⁸³ Note also, objectively, capitalist decadence (abandonment of productive investment) was facilitated, because subjectively underpinned, by unrestrained desire (profligate consumption), itself a product of the requirements of capital (determining educative institution restructuring. See above *Capital, Class and Consciousness*, Part II, "Potential Revolutionary Agency"), exhibited in the notorious inability of capitalist executives to see beyond the horizons of quarterly profit statements as infrastructure decays and plant and equipment are deployed far beyond their useful life (at maintenance costs far less than those of new investment), making that plant and equipment dangerous (e.g., 60-yr old nuclear facilities).

But return to our historical account of the general movement from productive investment to speculative finance: As state industrial policies pushed East Asian capitals (which, after 1978 unnoticed for a decade, now included China) to further rationalization of production system ("lean" production, just-in-time inventories, just-in-sequence deliveries avoiding large capital investments in inventories, achieving quicker turnover times), in the capitalist metropolises desperate capitals defended their remaining core operations, now increasing technically innovative inputs (automation) into these operations, and only into them. Simultaneously large numbers of older plants were shuttered, among them the Fordist auto complex facilities which manufactured bigger, larger engined vehicles or parts and components for them, and as still more were transplanted abroad where labor-power was vastly cheaper and the technological base more advanced: As productive assets were cannibalized by way of downsizing, outsourcing, offshoring and restructuring, speculative ventures were pursued with a vengeance, often following in the wake of regionally specific sites of unproductive military Keynesian spending as that spending soared. Before 1987, "easy money" was starting to come into play. The industrial base contracted as productive investment in plant, machinery and novel technical inputs began to be abandoned. By the mid-1990s, what had emerged in the old centers of capitalism (Britain, France, Italy, Canada, the United States above all) were nascent rentier formations, mass consumption economies, centered and fueled by an explosion of activity in the finance, insurance, real estate and entertainment sectors. By then this new direction of capitalist "development" had already undergone a first shock. A second (an accompanying stock market crash) was soon to follow. The first (1987) was the savings and loan crisis in the United States: All across the US, smaller banks (which soaked up the savings of workers, smaller owners and River Valley to the north, maybe a half dozen paper mills still stand.

³⁸⁰The fall in the rate of profit marked its nadir in 1983. See Michael Roberts, *The Great Recession: Profit Cycles, Economic Crisis*. N.p., 2009: 33, 36, 42, 44 (all charts). Roberts utilizes both value and price determinations of the rate of profit in the United States in the periods under discussion. (For the significance of this, see "Immediate Forms of Capital, Constant and Variable Capital," n. 585, above.) The outcome (the falling rate) is substantially the same.

³⁸¹*Das Kapital*, II, 2.1: 62, 80; in particular, 2.2: 80.

³⁸²Relatively speaking, having peaked at 18% in 1981, the prime interest rates was dramatically lower by 1984. There was, in other words, more than just a good deal of borrowing of money-capital (at rates ranging from 4-7%) going on also. Credit was widely available largely because borrowing (which had dried up during the Volcker-Reagan induced, deep recession, 1981-1982) had restarted in earnest, but this was not yet the fiat money-determined low interest rates that would begin to appear in the early 2000s.

³⁸³Michael Roberts, *Ibid*, 43-44. The distinction between primary and secondary roles is ours. (Attributing 70% of that decline to unproductive expenditure, Roberts' position, *Ibid*, 44, is the inverse.)

professions) lent this money out to local businesses for construction, concentrated in multi-family dwellings (apartments, condominiums), but especially in commercial real estate (office buildings, strip malls, eateries, etc). These smaller saving and lending operations were attempting to cash in on the boom in commercial property which had begun in the large metropolitan centers, and in areas with concentrations of military facilities, as interest rates fell. Those rates began to rise markedly as the very presence of vast sums of easy money chasing, relatively speaking, limited goods, inflation, shot up in the late 1980s. The small banks had to pay higher rates to depositors but could not raise rate to business borrowers, having lent money out earlier at considerably lower fixed rates. Caught in this squeeze, the banks went belly-up (and, in some cases, e.g., one of the Bush family brothers, absconded with their depositors' money).

By now (i.e., the early 1990s), the class conflict and struggle which had frightened owners of capital, and hastened offshoring of productive investment, had a momentum of its own. With one eye looking backwards to the successful employers' offensive of the eighties and the other eye warily focused on inroads of foreign capitals (with their more technically advanced machinery and organization of labor processes) into the North American market, US industrial capitals, those still standing, renewed demands against organized workers in a third phase of "de-industrialization." Standing out here was the Decatur, Illinois "war zone," major class battle fought first at Caterpillar (1992), then Bridgestone/Firestone (1993-1994) and finally Stanley (1996). In front of all this (1990) was the strike at Greyhound (which suffered from declining sales as increased air travel borne by low cost air carriers with their lower variable capital emerged following the Reagan Administration's deregulation of air travel, and as cheaper, smaller Japanese autos flooded the US market, making car travel possible for an albeit relatively small portion of the busing companies clientele). Stretching back nearly twenty years to the stalemated miner workers strike in 1978, each of these conflicts from the air traffic controllers strike and mass firings in 1982 until the Stanley struggle in 1996 was defeated. For capital, each of these wins was also a loss as trained, experienced workers quit, ramped up absenteeism and sabotage after the lost strike, and demoralized no longer had "their hearts in the job," i.e., as productivity fell dramatically at best counterbalanced by the gains (low wage structure, benefits sharply curtailed or abrogated) of strike victory; for labor, this string of defeats effectively constituted a single major class confrontation of historic proportions in which workers were crushed, and it issued in a historically significant class recomposition, massively enlarging the layers of the casualized, transforming a very nature of the US proletariat, an unmitigated disaster for a class that has already suffered a long string of defeats stretching back nearly three decades. Before the end of the millennium, the United States had become a full-fledged rentier formation without an economically and productive significant industrial base outside an increasingly automated defense industry (small shop, unorganized and export industry notwithstanding), thereby making domestic productive investment a non-starter, accelerating still further capital inflows into speculative finance.

There are two interconnected, and intertwining sets of events, processes and relations here. To one side, each downturn (1987, 1992, 2001, 2008) in the United States has marked an inflection point, resulting from a qualitative increase (often featuring new mechanisms for) heightening the explosion of financial speculation; to the other, the financial system, perhaps centered in the United States, is global, with some events having only domestic repercussions while other large-scale ones transpire in one part of the world and reverberate in others.

Thus, in 1987, the establishment of a national bad bank to bail out the vast savings and loan sector which had freely loaned money essentially without collateral to expand housing; in 1992, the closure of a large number of military bases to counteract the increasing weight and drag of non-productive expenditures on state revenues; in 1994, the Mexican peso crisis (another fiat currency) starting from an expansionary fiscal and monetary policy, issuance of short-term notes guaranteeing repayment in US dollars to attract foreign investment, political instability (Chiapas revolt), downgrading of Mexican assets in the financial centers of world capitalism, Mexican state purchases of its own securities, capital flight, inability to sell new issuances, devaluation very late in the year, prospects of a default and US state-backed loan guarantees as a (\$50 billion) bailout,³⁸⁴ just as the effects of the liquidation of Mexican assets split over into "emerging markets" more generally; by mid-1997, especially among those "newly industrialized countries," the sell-off of assets with a particularly severe impact on Thailand where the Thai state, its foreign currency reserves drying up, its imports accumulating foreign debt, was unable to support the baht currency peg to the US dollar with the all-too-predictable capital flight, spilling over to Indonesia and South Korea (and to a lesser extent to Hong Kong, Laos, Malaysia and the Philippines) exciting the same "investor panic" in those same metropolitan capitalist centers, with the predictable consequences of devaluation of currencies, stock markets and other key national assets together with a rapid rise in debt, as here too a bailout (\$40 billion distributed among Thai, Korean and Indonesian states) by the IMF, and here too the same US and European investors swooped in, as in Mexico, and acquired much of those now very cheap assets. But the "contagion" had not ended, for in June 1998, investors, still the same ones, effectively began an attack on the Russian ruble against the backdrop of declining oil demand (itself "fallout" from the Southeast Asian currency debacle), as the Russian central bank hiked rates steeply

³⁸⁴Consequences entailed a rapid run-up of domestic inflation, collapse of banks stemming from mortgage defaults, a sharp downturn, and, of course, rising unemployment and further impoverishment.

to uphold its currency valuation and stem capital flight, with IMF support by way of a swap of maturing Russian state short-term bills for long-term Eurobonds, as matters were "complicated" by a coalminers strike (the state was \$12.5 billion in arrears to the workers generally), as the bond swap failed to stabilize the ruble peg to the US dollar (those pesky "investors" kept selling Russian rubles off driving its value down), as the central bank continued to support the peg spending foreign reserves to do so, with "salvation" lying only in recovery in Southeast Asian rapidly increasing oil demand, a steep world oil price rise and Russian trade surpluses in 1999 and 2000;³⁸⁵ in the same years, valuation of technology stocks in the US soared benefiting from legislative investment easing and supports (the Telecommunications Act of 1996), the lowering of top marginal capital gains taxes³⁸⁶ and the 1999 repeal of Glass-Steagall separating deposit from investment banking (achieved by the Financial Services Modernization Act), declining interest rates engineered by Alan Greenspan, Federal Reserve Chair, as venture capital poured into high technology firms and stock valuations began to surge, a large bubble rapidly expanded and in 2001 blowing up in the dot.com market crash centered on those high-tech stocks; "easy money" based on a fiat currency now flowed freely, as in 2002, the ubiquitous Greenspan, having failed to draw the conclusions from having facilitated easy credit in front (1999) of the tech stock collapse, once again resorted to "amplify[ing] the liquidity to insure no harmful effect" (i.e., market crashes, financial crises) and in the aftermath (2003-2004) of those "harmful effects" which in fact said measures had brought on (the 2001 crash), not just accelerating expansion of the housing section (again), but vastly stimulating nearly non-existent credit default swaps (CDSs, contracts which hedge against losses in stocks, bonds, currencies, interest, commodities, thus creating counter party risk),³⁸⁷ bringing into being a derivatives market that reached almost \$600 trillion by 2009, exceeded 700 trillion by July 2011,³⁸⁸ and today is over a quadrillion dollars, all of which paved the way for the financial crisis (2008-2010).... Along the way, we would note, in the United States financialization has sucked existing sources of revenues up as the social security program with its own self-funded, independent reserves had long been absorbed (1983) into general revenues making those surpluses accessible to cover budget deficits, and drawing them down to a point where the trust fund is now approaching insolvency...

September 2008

Before examining the financial crisis and especially its aftermath which is still with us today, we can very briefly pose the whole problem generally.

The abrogation of the exchange of gold for dollars returned to the United States by central banks of the world effectively generated a relational network of free floating currencies, generalizing the empowerment of metropolitan capitalist central banks to create fiat currencies, which, in other words, ensured that financially speculative activity would come to dominate productive investment... because the former was becoming, has been and is now far more profitable... With this, surpluses actually came to consist in a vast accumulation of fictitious titles which far exceeded the value (expressed monetarily) of the real assets on which they were claims, as asset bubbles ballooned. The mechanism for creation of this fictitious accumulation is "easy money," i.e., the fiat currencies printed at will by central banks, first, to insure expanding economic activity and, then, to starve off financial crisis. That (fictitious) accumulation rested on the enormous debt circuitously incurred in printing money, as it were, to infinity. This was the situation in 2008, and with the 2020 pandemic lockdown and consequent collapse of economic activity of all kinds, is, far more really, the situation today as once again a return to the open crisis of capital more and more becomes likely.³⁸⁹

³⁸⁵ Along the way, a couple of causalities of the Russian currency collapse were Bankers' Trust (heavily invested in Russia government bonds, its stock valuation shrank dramatically) cannibalized by Deutsche Bank, and Long Term Capital Management which lost heavily where it had huge investments (Southeast Asia "emerging markets") an enormously overleveraged hedge fund finally sunk by the Russian currency debacle.

³⁸⁶ Product of the Clinton-Gingrich convergence, relief for those terribly beleaguered investors in the form of Taxpayer Relief Act of 1997.

³⁸⁷ Collateralized debt obligations (CDSs) existed since the early 1990s, but usage accelerated phenomenally after 2002. Not traded on official exchanges, they are, even in capitalist terms, unregulated and exist in a gray area without "supervision" and without formal protocols for issuance.

³⁸⁸ Monetary and Economic Department of the Bank for International Settlements, "OTC Derivatives Market Activity in the First Half of 2011," December 2011. Accessed online at http://www.bis.org/publ/otc_hy1111.pdf.

Michael Roberts offers still another revealing, and *global* perspective on the vast growth of speculative finance relative to productive investment: "In the first seven years of the decade of 2000, fictitious capital grew at over 25% a year compared to the growth of real production in the capitalist world (up a maximum of 5-7% a year). Money supply printed by the central banks rose about 7% a year, while banks increased loans by over 10% a year. And then there was the issuance of bonds by big companies and governments. That form of credit rose by over 15% a year to reach \$73trn by 2006, or around 140% of world annual production.

"But the most staggering part of the explosion of fictitious capital was in the value of what are called derivative contracts. Of the \$70trn in debt, about \$11trn was 'sold on' over and over again in various contracts derived from that debt. These derivatives, in essence bets on the future value of a bond, a mortgage or a share, rose in value to a staggering \$550trn, or 11 times annual world output." *The Great Recession*, 180.

³⁸⁹ In retrospect one might ask why, given all the damage it has done to the expanded reproduction of capital, lockdowns in the first place? For anyone who lived through the interminably long March of 2020, memory is indeed short-termed if it is not recalled that no

In the broadest terms, the more credit issued, the more fictitious claims to surplus-value, the greater the pressures built in the reified system of social relations to realign those paper titles with the actual production of surpluses. At a certain point (September 2008), this pressure became too great to contain. Thus, the financial crisis.

So, preliminarily still, what is fictitious accumulation and what is its mechanism?

What is at issue is the various relations through which legal claims and ownership metamorphose: An investor, say, buys a house. He rents it out. In paying rent, the renter has a claim on the house. The investor is legally the owner, so obviously he has a claim on the home. The mortgage on the property means, at least initially, the bank has legal title. But the bank doesn't want to hold this title, or hundreds or thousands like it, if more profitable investments are available. The bank, "packages" that title along with other mortgages and sells them to a brokerage house or investment bank (which like the home loan, but with *seemingly* less risk, generates a revenue flow), and which now has a claim on them. These mortgages are individually divided, maybe artificially generated sections (e.g., the first 48 months of payments, the 8th-12th years of payments, etc.) are graded according to quality (likely not), they are in other words "sliced and diced," and then they are recombined with other similarly reworked mortgage packages and perhaps securities of other forms, "repackaged" or "bundled," then resold to still other financial institutions, who now have a claim and who, in turn, offer them as part of a portfolio of holdings to wealthy investors who through their purchases are simply paid an annual (quarterly, monthly, whatever) return on their investment, and who also have a claim on the original asset, the home(s). At almost all steps along the way, each individual, investor or institution believes it has some claim to the property. Some are legally enforceable, others not. But there is more: There also may be an insurer guaranteeing the debt that also has some type of claim, say the state at the national level (in the US the Federal government through one of its many lending agencies (e.g., Fannie May), since its loans or debt guarantee programs are also dependent on the underlying assets. To boot, if the owner doesn't pay his taxes, the state at the municipal level, local government which we emphasize is still the state, may legally assert a claim to the property (home).

While it is clear that, starting from the existence of a system of fiat currencies, the central bank policy of "easy money" (i.e., extremely low interest rates, rates not aligned with existing levels of productive activity) was *the* condition for the creation of financial bubbles (or, if you prefer, officially sanctioned ponzi schemes), it is also patently manifest the transfers and transformations of ownership had escaped central bank control. By 2008, there were many "vehicles" or "instruments" of transfer, purchases and forms of ownership none of which were in the hands of central bankers. These included structured investment vehicles,³⁹⁰ credit default swaps and their formalization (head funds, bets on whether a loan, a firm, a policy would or would not fail, whether a political or financial event would transpire, etc), and, relative to the instantiated discussion of housing above, subprime loans and CDOs (credit default obligations). That was the fundamental situation in summer 2007 when the housing market in the United States had already past its peak (summer 2006) as the bubble, fueled by easy money (easy credit), stopped expanding, that is to say, that in different parties of the country (i.e., in the "hottest" markets with the highest home prices with valuations completed unrelated to the capacity of buyers to make payments) handfuls of individuals (or families) said, "No, this is crazy, I won't pay the price. I can wait, these price rises can't go on forever. Something 's gotta give."³⁹¹ And give it did. Once it did, the enormity of the exposure of lending institutions of all kinds (and, by way of the stock market, of buyers of all these dubious "instruments," pension funds, insurance companies, mutual funds, and so on) became starkly visible. The collapse of Lehman Bros., 15 September 2008, was the open breaking point, after which bankruptcies multiplied, credit froze up (those lending institutions, those still unaffected, could not trust each other, for which will be the next to fall; thus, lending dried up).³⁹² This collapse accelerated gaining momentum and speed in the months of October and one, absolutely no one, knew either the rate of spread or, above all, the mortality rate of the coronavirus (SARS-CoV-19). Like everyone else owners, large and small, now desperate to reestablish pre-Covid levels of economic activity, were terrified by contagion and the likelihood of death, and ghostly fearful that continuing "business as usual" would ensure both.

³⁹⁰A structured investment vehicle (SIV) is an actually an institution, a financial one but not a bank. Its aim is achieve a credit spread between longer-term assets it holds and its issuances, shorter-term liabilities. Those who own the institution are, we might say, simple credit spread lenders, by investing in securitizations, corporate bonds, funding themselves by issuing commercial paper and medium term notes. The institution is safer, i.e., it as a rule holds assets until maturity, and is not exposed to interest rate or currency risks largely because they are permanently capitalized; though not safe, i.e., SIVs lend short-term and borrow long-term and are thus subject to liquidity squeezes, and in a depressed market they may be forced to sell below their margins, while in a financial crisis their assets themselves are more likely than not to become worthless.

Originally developed in corporate debt markets, after Greenspan really opened the spigot on easy money credit debt obligations became means for refinancing mortgage-backed securities. Based on revenues accruing from cash flow, the CDO is a promise to pay investors in a specified sequence (again, monthly, quarterly). This is the "vehicle" or "instrument" described in our housing example with its numerous claims to title we describe in the textual account above.

³⁹¹By summer 2005, "... average US house price rises were about 25% over trend, but in hot spots the level of over-valuation was more like 50%. In Los Angeles, the real estate association has calculated that only the top 17% of all wage earners can now afford the price of an average home! It does not matter that mortgage rates are still low. The level of prices in many areas is so high that hardly anybody can buy," Roberts, *ibid*, 21.

³⁹²Panic spread throughout the global financial system: "...the collapse of Lehman Brothers was followed within days by the threatened collapse of banks in nearly all the major Western states (AIG in the US, HBOS in Britain, Fortis in Belgium and the Netherlands, Hypo

November, so that by the beginning of December the lords of finance, especially those domiciled in the state (i.e., the Treasury Secretary, the chair of the President's Council of Economic Advisors) and those intertwined with the state, with the Treasury (the chair of the Federal Reserve, president of the Federal Reserve Bank of New York), went to the White House to inform the Executive that a massive bailout of banks and financial institution (to start) would be necessary, either that or, to cite Hank Paulson, "There will be rioters with pitchforks in the streets with two weeks."³⁹³ A review, a timeline of sorts, of the fate of the more at-risk US financial institutions, circa 2006 onward, will exhibit something of the structure of a financial crisis.

By 2006, an element of the easy money regime was clearly visible, and not *ex post facto* but contemporarily, in the 1/3 of all mortgages in the United States which were low income loans, no stated income loans, or subprime loans. Delinquency and bankruptcy rates among home owners had been rising for a year.

On 2 April 2007, New Century, a US real estate investment trust laden with subprime loans filed for Chapter 11 bankruptcy protection; on 20 June 2007, having received margin calls Bear Stearns bailed out two of its hedge funds with \$20 billion of exposure to collateralized debt obligations including subprime mortgages. Forty-one days later, 31 July 2007, the two hedge funds were liquidated. This was the beginning of the subprime mortgage crisis; on 6 August 2007: American Home Mortgage filed for bankruptcy.

Note now, as the crisis deepened, its transAtlantic nature: On 9 August 2007, Paris, France-based BNP Paribas blocked withdrawals from three of its hedge funds with a total of \$2.2 billion in assets, citing "a complete evaporation of liquidity." This made fund valuation impossible. Banks refused to loan to each other, a transparent indicator that credit was drying up; on 14 September 2007, the British Northern Rock, a bank middling in size and heavily leveraged, was rescued with a loan from the Bank of England. The immediate upshot was panic and a bank run; on 18 September 2007, the Federal Reserve began the first of a series of rate reductions in high anxiety over liquidity and investor confidence; on 28 September 2007, a low overhead operation, NetBank, filed bankruptcy due to its overexposure to home loans, too many of which delinquent were stanching its revenue flow; on 15 October 2007, Bank of America (BoFA), Citigroup and JPMorgan Chase detailed plans for the \$80 billion Master Liquidity Enhancement Conduit to provide liquidity to structured investment vehicles. (By December, the plan was abandoned, the SIV largely worthless); on 17 December 2007, another US housing lender, Delta Financial Corporation, filed bankruptcy unable to securitize subprime loans.

The next two noteworthy events not only indicated a rapidly deteriorating situation, but the likelihood that the cascade of failings was beyond institutional control and would, with the same likelihood, lead to a financial collapse: On 12 December 2007, the Federal Reserve established the Term auction facility to supply short-term credit to banks with sub-prime mortgages, and on 11 January 2008, Bank of America agreed to buy Countrywide Financial, the largest home mortgage originator in the US, for \$4 billion in stock.

A pause in onrushing events renewed faith in the viability of existing financial arrangements as, on 22 February 2008, the nationalization of British Northern Rock was completed, shoring up faith in that viability.³⁹⁴

But on 5 March 2008, a large US investment firm, The Carlyle Group, received margin calls on its mortgage bond fund; on 17 March 2008, Bear Stearns, having previously liquidated two hedge funds (above), and still with \$46 billion of mortgage assets that had not been written down, and \$10 trillion in total assets (much of which in the convoluted world of finance were actually liabilities), faced bankruptcy. Bear Stearns was a huge investment house. The US Federal Reserve stepped in. At its first emergency meeting in 30 years (suggesting the depth of the crisis), it agreed to guarantee its bad loans. But this was merely to facilitate its acquisition by JPMorgan Chase at a bargain basement price (\$2/share).

The cascade of failures had renewed itself, and accelerated, so on March 18, 2008, in a disputatious meeting, the Federal Reserve cut the federal funds rate by 3/4 of a point. This was its sixth cut in six months. It also allowed

Real Estate in Germany, the three major Irish banks, the Icelandic banks." Chris Harman, *Zombie Capitalism: Global Crisis and the Relevance of Marx*. Chicago, 2010 (2009): 290.

³⁹³Paulson was Secretary of the Treasury. And, yes, the term "pitchforks" was actually used. With the dimmest of historical memory of proletarian uprisings of the past, it is a reference to dispossessed peasants, once petty rural proprietors, who having been expropriated and dispossessed, and were now seeking retribution against the great lords of the countryside (who the bourgeoisie of course in this fanciful and travesty of historical metaphor identify with).

³⁹⁴Truly global, the financial crisis reached the most remote areas. Michael Roberts writes:

In November 2007, "Few people in the remote Norwegian town of Narvik, 200km north of the Arctic Circle where the sun has disappeared until January, were likely to have given a lot of thought to the credit squeeze sweeping the global money markets — that is, until it now threatens their wages over Christmas.

"Narvik, along with three other similarly isolated towns of Hemnes, Rana and Hattfjelldal, has become the latest community to discover just how directly even the most remote places can be affected by the financial turmoil after it made multi-million dollar bets on complicated US-linked financial products.

"The towns invested about \$96m (€65m) in complex products linked to unspecified municipal bonds in the US, designed by Citigroup, and sold to them by Terra Securities, the investment banking arm of one of Norway's leading banking groups. Now representatives of the towns have admitted that recent market movements linked to the credit crisis had destroyed most of the value of their investments." *The Great Recession*, 176.

Fannie Mae & Freddie Mac to buy \$200 billion in subprime mortgages from banks. Officials thought this would arrest further unfolding of crisis. And it did... for awhile.

On 11 July 2008, the home mortgage lender IndyMac failed; on 30 July 2008, the Housing and Economic Recovery Act of 2008 was enacted in Congress, and stemming from it, on 7 September 2008, the Federal government began a takeover of Fannie Mae and Freddie Mac.

Then, on 15 September 2008, the Federal Reserve refused, unlike in the case of Bear Stearns, to guarantee Lehman Bros. loans. The US stock market tanked. Further, another big investment house, Merrill Lynch, was primed to go belly-up. It was acquired by Bank of America for \$50 billion, but only after the US government and the Federal Reserve guaranteed debt repayment. (Hitherto in talks with Lehman both Bank of America and Barclays had turned down sellout offers.) The Fed's Reserve Primary Fund was exhausted in this action.

It was at this moment that the financial become *open*, and from this moment at which it is generally dated. Its character as such was evident and obvious, as events snowballed: On 16 September 2008, the Federal Reserve took over American International Group (AIG) with its \$85 billion in debt; on 17 September 2008, overnight US money market funds approached collapse as investors withdrew \$144 billion. This had further ramifications beyond internal collapse, as these funds were often invested in titles issued by large corporations to fund their payrolls and daily operations, meaning any further run on money market funds would dry up lending to the same companies, leading, of course, to closure of operations, mass layoffs, which in turn would spread throughout the US economy and down supply chains to Asia and Europe.

In a tension filled meeting on 18 September 2008, US Treasury Secretary Hank Paulson and Fed Chair Ben Bernanke told House Speaker Nancy Pelosi a complete meltdown in US credit markets was immanent. Bernanke requested a \$700 billion fund to acquire toxic mortgages, creating another bad bank (on a far large scale, shades of the 1987 S&L bailout). Two days later, Paulson made a request to the entire Congress to authorize that \$700 billion appropriation. In the meantime, the day before, 19 September 2008, the Federal Reserve created the Asset Backed Commercial Paper Money Market Mutual Fund Liquidity Facility to temporarily insure money market funds, allowing credit markets to freely function and loans made to finance corporate operations to continue.

On 21 September 2008, Goldman Sachs and Morgan Stanley converted from investment banks to bank holding companies to increase their protection by the Federal Reserve. The next day, Mitsubishi acquired 20% of Morgan Stanley seeing it as a safe, cheap risk.

On 26 September 2008, the last of the large home loan originators, Washington Mutual, went bankrupt. It was seized by the FDIC in the tenth day of a bank run during which depositors withdrew \$16.7 billion.

Hereafter, the US stock market steadily, day after day, declined into the next year as investors drearily watched their assets disappear;³⁹⁵ but from this moment onward, the nature of the crisis shifted, at least for the largest financial capitals, as the US state stepped in, and, *injecting itself still further into the battered circuits of capital*, after much anguish and hand wringing, legislated funding and bailout money for the greatest of American capitals.

The Concentrated Power of the Bourgeoisie, the State, Combats the Collapse

Here we shall treat the Federal Reserve as an arm of state, and make no qualitative distinction between legislation emanating from Congress, Executive actions and those of the Fed.³⁹⁶

We have already noted the Federal Reserve takeover of AIG (16 September), the Fed's creation of a reserve to backstop money market funds (19 September) and Treasury Secretary Paulson's request to the Congress to

³⁹⁵The author vividly recalls watching Katie Couric, NBS Nightly News anchor, clearly depressed with a significant amount of her \$15 million a year salary over the years tied up in a once booming stock market, announce those daily declines.

³⁹⁶The Federal Reserve chairperson is appointed by the US President. In a formal sense, the Fed nonetheless is independent of the Executive's control, and this is clear from its priority in periods of general financial malady when it acts to preserve the operating viability of the great financial capitals. However, in moments of general crisis the Federal Reserve works hand-in-glove with the Executive, in particular the Treasury Department in efforts to shore up the entire financial system. This was certainly the case in autumn 2008 and winter 2008-2009.

In the run-up to the financial crisis, low interest rates were supported by a circle of Chinese manufacture and American consumption: The Chinese made goods that Americans bought, the Treasury issued bonds, 1 yr, 2 yr, 5 yr, 10 yr and 30 yr notes, which the Chinese state bank, first among others, purchased permitting the Federal Reserve to keep interest rates very low, allowing the US middle stratum (and a layer of proletarians) to consume profligately, purchasing goods made in China, by way of home refinancing and home equity loans.

Before the financial crisis had "run its course," however, this relation collapsed, a situation which itself qualified as critical. Since then, the Treasury has continued to issue bonds to finance US debt and government spending. The Federal Reserve offered a handful of great banks financial incentives to purchase Treasury bonds, and repackage them with other assets. When the latter would not sell, the Fed purchased them and placed them on its balance sheet. In autumn 2019, the Fed dispensed with the banking middlemen: It has directly purchased US Treasuries placing them on its balance sheet. In either case, the bonds have been returned to the Treasury, "retired," with accumulated interest when reaching maturity. A neat little trick that without the dollar functioning as the world's reserve currency would be hyperinflationary. The core of the "operation" is housed in Treasury in an agency called the Exchange Stabilization Fund. The entire complex relationship over time demonstrates that the Federal Reserve, whether operating independently or not, is an arm of the US state.

authorize a \$700 billion appropriation to finance a bad bank to absorb defaulting mortgages.

On 29 September 2008, the House (Republicans overwhelming opposed) failed to pass the Emergency Economic Stabilization Act of 2008 (EESA). On 1 October, the Senate passed the Act, and 3 October in a second vote the House did also. It was signed the same day by President George Bush. The EESA included \$700 billion for a Trouble Asset Relief Program (TARP). It was this program which, by the way, "troubled" the "fiscally conservative" "consciousnesses" of the "scrupled" Republican right.

On 7 October 2008, basing itself on the EESA, the Federal Deposit Insurance Corporation (FDIC) increased deposit insurance coverage to \$250,000 per depositor. On the 14th, the FDIC created a new fund, the Temporary Liquidity Guarantee Program to secure the oldest debts of all FDIC-insured institutions through the second quarter (30 June) of 2009.

On 24 October 2008, in a transaction driven by federal regulators, PNC Financial Services agreed to acquire National City Corp, another great bank which otherwise would have gone belly-up.³⁹⁷

On 25 November 2008, the Fed announced creation of a Term Asset-Backed Securities Loan Facility, and on 16 December 2008, it lowered the federal funds rate to zero percent (0%). This facility, it was discovered later (by a Ron Paul House subcommittee in 2012), lent money gratis, some 2 trillion dollars in all, to banks without discrimination and not only US banks as German, French and Swiss all participated in the program.

20 December 2008: Financing under the Troubled Asset Relief Program was made available to General Motors and Chrysler, both of which were "burning through" cash reserves (GM to the tune of several hundred million dollars daily) to meet financial obligations with virtually no revenue flows (i.e., sales had cratered and surplus-value was no longer being realized). Neither would have existed more than a few days into the new year without the cash infusions.³⁹⁸

As we shall shortly note, stock market declines (devalorization) continued, though a certain, limited stability had been achieved, effectively the flow of credit had been unfrozen; but a "bottom" had yet to be reached, "investor confidence" was not about to return, among viable firms cash reserved were carefully guarded (i.e., hoards remained), that is no new investments were being undertaken. So, on 13 February 2009, Congress approved the American Recovery and Reinvestment Act of 2009, a \$787 billion economic stimulus package. (As President, Barack Obama signed the bill the same day.) The hemorrhaging had yet to stop as indicated by US government action to further buy into Citigroup (7 February 2009) to the tune of a stake 36%, and by a simple statistic, a Commerce Dept report showing that GDP shrank at the sharpest pace in 26 years. The bourgeoisie, among it those with cash hoards, remained reticent to invest even though devalorization had cheapened any number of viable firms. Generating the fear of "nationalization," it was the state buy-ins to GM, Chrysler, Citigroup, AIG and others which made them pull back.

On 20 May 2009, President Obama signed the Fraud Enforcement and Recovery Act of 2009, and 17 June, he along with key advisers introduced a series of regulatory proposals. These concerned buyer protection, executive pay, banking capital requirements, and increased regulation of the shadow banking system together with derivatives. He also proposed enhanced Fed authority to safely shutdown firms deemed systemically significant. With the exception of the last, the proposals did not go down too well with large capitals. Obama was not done, largely because excepting the great financial institutions there was no "recovery," mortgage foreclosures were now snowballing, unemployment remained exceedingly high by historical standards, and though trade internationally had come off its bottom and was slowly expanding (the result of a massive Chinese infrastructure build-out), the "Great Recession" was far, far from over. On 22 January 2010, he proposed legislative adoption of the "Volcker Rule." It limited the ability of banks to engage in proprietary trading. On May 2010, the US Senate passed the Dodd-Frank Wall Street Reform and Consumer Protection Act. (The House had passed it 11 December of the previous year). The Volcker Rule against proprietary trading was not part of the legislation. On 21 July, the President signed the bill into law...

For the bourgeoisie, the "darkest" moments of the crisis witnessed state action very closely aligned to ongoing collapse of stock valuations, i.e., these institutional actors, some ruling class personalities, most bourgeois politicians, were prodded to actions they would have never otherwise undertaken by terrifying prospects of rapid, continuing and

³⁹⁷It wasn't that PNC really didn't want to buy National City. As cheap as the negotiated price was, PNC didn't have the assets. No problem. The sale was consumed *within hours* after receiving TARP money, some \$7.6 billion to cover the purchase.

³⁹⁸Though it took awhile to get the program up and running, until the end of October, General Motors was a late comer. (There was the usual Republican party hostility toward this highly unionized, Yankee corporation, which had to be finessed.) Inclusive of its financing wing (GMAC), GM got \$30.7 billion. But, hands extended, the big banks were johnny-on-the-spot. According to Treasury website report (since taken down), Citigroup and Bank of America both got \$45 billion, AIG \$40 billion, JPMorgan Chase and Wells Fargo both \$25 billion, Goldman Sachs and Morgan Stanley both \$10 billion, as we indicated PNC \$7.6 billion, US Bancorp \$6.6 billion, Regions Financial \$3.5 billion, American Express \$3.4 billion, Bank of NY Mellon and State Street both \$2.3 billion and Discover Financial \$1.2 billion. Johnny-on-the-spot? The large banking capitals all received TARP money on 28 October 2008. The fear of nationalization alluded to in text refers to the fact that these bailouts were conducted by way of purchase of preferred stock. Thus, if and when these capitals once again became profitable they returned monies in the amount of stock purchase prices, the bailout amounts. Of course, it is stated there were (nominal) interest charges, though there is solid grounds for thinking these monies were divvied out interest free. And, least it be forgotten, the Troubled Assets Relief Program guaranteed Citigroup and BoFA assets in the amount of \$306 and \$118 billions, respectively. Had the federal government been forced to cover those assets, the total outlays listed here (about \$682 billion) would have pretty much exhausted the entirety of the Congressional TARP allocation.

massive devalorizations of the great capitals.

Thus, following a House rejection of the EESA, 29 September, the DJIA dropped 7%, 778 points (the S&P 8.8%, the Nasdaq Composite 9.1%), its largest single day loss in history; across the world, several market indices fell in excess of 10%. As an indicator of bourgeois sentiment, the stock markets are quite sensitive to fear (and greed, as is well-established, the only two emotions the bourgeoisie really experiences), and, fearing ruination, market volatility was indeed extremely high. The Bush family sitting aside the dead mechanical heart of this class of exploiters and predators, George Bush understood these sentiments well. The next day, as President he gave a rousing speech, spurring on the Congress to legislatively act. The DJIA rebounded 4%. A day in front of the House vote (3 October) on the EESA, market indices fell 4% on fears of another House rejection of the bill. Fears abounded, prospects of nationalization by way of financial support to collapsing firms was in the air, the FDIC action midweek indicated the money market funds, effectively provision of a money-capital lending platform, might simply disappear. But, for investors carefully monitoring this reified institutional abstraction, the worst stay lay ahead: From October 6–10, 2008, the DJIA closed lower each and every session. Levels of activity set new record lows. It fell 18%, over 1,874 points. Either way our starry-eyed investor looked at (percentage or point wise), it was the worst weekly decline ever recorded. (The S&P 500 fell more than 20%.) "Contagion," i.e., fear like a highly communicable - easily transmitted disease, was spreading: On the 9th, 10th and 13th, Icelandic stock trading was suspended during the course of the day to stop the freefall. These actions had been preceded, 8 October, in Indonesian by a halt in trading after a single day drop of 10%. In Iceland, the market reopened on 14 October, closing that day 77% lower than it had a week earlier. On 16, the Swiss state revealed a rescue plan for its two largest international financial capitals, USB AG and *Credit Suisse*. Before the end of the month, a good number of the world stock exchanges had undergone their worst declines in their respective histories.

Like a ruptured artery, the hemorrhaging continued. On 6 November, the European Central Bank (ECB) and the Bank of England both made major interest cuts, the former not in mere base points instead trimming an entire 1/3 of the existing rate. Less than two weeks later (20 November), the IMF granted an emergency loan to Iceland after its two leading banks failed, resulting in a steep currency devaluation. Subject to draconian ECB measures, on 6 December 2008 masses of Greek workers, students, professionals and smaller business peoples hit the streets of Athens (and other cities) opening what has been called the "era of riots." Similarly (but less tumultuously), for 7 days vast crowds filled the streets of Reykjavik. The Icelandic government collapsed on 26 January 2009.

On 20 February 2009, the DJIA closed at 6 year low, as that pesky investor had again bullied its way into capital's media spectacle with renewed and growing fears of bank nationalizations. As if flexing its muscles to demonstrate such an option was intolerable, the predatory class of speculators withdrew further from the market, the DJIA closing at a low that hadn't been hit since 1997, reaching on 6 March its bottom, 54% below its 9 October 2007 high.

This date (6 March) was a nadir, for thereafter extant financial capitals began to announce gains, recovery, growth. On 10 March, Citigroup declared it had been profitable for the first two months of the calendar year 2009, its shares climbing 38% on the news. Similarly BofA on 12 March announced it too had had two profitable months. (The DJIA rose.) Of course, both banking firms had been recipients of federal largesse, fiat money that would latter be backstopped by revenues extracted from the blood and sweat of workers by way of austerity. (Austerity would soon become the order of the day among states: The assumption of bad debts of the great financial institutions by central banks, together with state executives' stimulus package had created interlocked national fiscal crises across the world, the cutbacks in production and unemployment had resulted in a rapid, large scale drop in tax receipts of states leading in those states to their fiscal crises. Austerity was aimed directly at the public sector proletariats who, of course, are "unproductive," i.e., do not create surplus-value).

While economic activity generally, production specifically, had been hammered (first quarter declines in the UK reached 7.4%, in Germany 14.4%, in Japan 15.2%, in Mexico 21.5%), by the end of April the Federal Reserve was projecting a 2.5-3% expansion for all of 2010, and in late June the National Bureau of Economic Research, a body charged with the task, declared the "recession" over.

The great financial capitals had been saved. Well, maybe. Before October 2009, as many as six large insurance capitals, names like Prudential and Hartford, were bailed out to the tune of \$1-3 billion each; not only had the Treasury bailed out auto and insurance capitals, by early spring 2009, the Federal Reserve had, astoundingly, established eight or nine new programs through which it pumped in excess of \$80 billion monthly into the US financial system, the lion's share into the large banks. This was done through the purchase of the "toxic assets," the mortgage-backed securities for which banks themselves could find no buyer. This transpired between December 2008 and June 2010. The practice was what came to be called "quantitative easing" (QE). This was the first round, otherwise known as QE1.

Collapse Spreads Through the Global Interlocking Network of Financial Institutions

Nearly a year later (March 2011), the situation globally was as follows.

The immediate reaction of capitalist states everywhere to the financial crisis beginning in early autumn 2008 was to come to the rescue of large financial capitals, to bail them out, to print money since, at any rate, there has been nothing so characteristic of capitalism today as financial hegemony within ruling class social groups that control the states of the world.

Nearly two years later, credit remained "illiquid," financial institutions were still willing to lend to only the most secure borrowers (both firms and individuals), world trade was still in free fall stabilizing only around industrial raw materials (iron ore, copper, steel, and foodstuffs such as wheat and soybeans, and beef and fish as well) that China deployed in its infrastructure build-out, sites of production continued to shutter around the world. Neither trade nor production was about to recover their 2006 levels. Having triggered the financial collapse through sale of residential and commercial mortgages packaged into convoluted securitization instruments (which amounted to little more than ponzi schemes most claims to titles could not be legally enforced, and since those claims exceeded the valuation of underlying assets by many multiples), the burst housing bubble had as its consequence housing markets that remained deeply depressed (worst in Britain, Ireland, Spain, Latvia and the Ukraine, the US, and at this moment, March 2011, just starting Australia), with prices still falling and foreclosures snowballing.

The reflex response of employers to a precipitous fallout in consumption demand had been layoffs and firings. Unemployment remains at historically high levels in Europe and the US, and at unprecedented levels in the capitalist world including the Middle East, where outside the state sector the employment available as and still is almost exclusively casualized work.

The response by states was to embark on spending to boost economic activity. Stimulus packages, were advanced everywhere, across Europe, Russia, the Middle East, in Japan, Korea, in the ASEAN countries (Thailand, Malaysia, Vietnam, etc.), in Latin America (Brazil, Chile, etc.), and most importantly in China and the United States (where, we noted, very early on, 13 February 2009 President Obama had signed a \$787 billion economic stimulus package into law).

This entire situation led the US Federal Reserve to engage (the Treasury) all over again in printing vast quantities of money in order to purchase bonds of the very same Treasury in the faux hope this would stimulate lending and spending.³⁹⁹ Instead, these purchases merely, and greatly, exacerbated the flows of "hot money," vast sums (product of monies accruing from nearly thirty years of lowering tax rates on capitalist firms, of printing money to cover wars in Iraq and Afghanistan without ever generating revenues to cover these "expenditures," of generally fiat money accessed at low interests and then the banking bailouts). These sum flowed to regions of the world where the greatest returns were available, into Brazil, Chile Canada, Australia, New Zealand East and Southeast Asia and Australia (its dollar being in part a surrogate for the Chinese yuan), and were deployed by the individuals and institutions (e.g., brokerage houses, pension funds) possessing and managing these monies to purchase crucial commodities (oil, copper, wheat, corn, cotton, etc.) sending world prices for these commodities soaring while the volume of trade of the rest of commodity exchanges stagnated or fell.

By summer 2009, bankruptcies in eastern Europe had cascaded. The European Central Bank could not stem the crisis. In the myopic bourgeois sense, yet centrally to capitalism regionally and perhaps globally, most at risk were German, Swedish, Swiss and Italian and Greek banks, the first three as lenders and the last two mediating domestic consumption. More specifically, German banks were deeply involved in Greece and (with the great French banks) Italy; the Swedish banks in Lithuania, Estonia and, above all, Latvia; and the Swiss banks in Poland, Hungary and Croatia.

We've already briefly described the situation in Iceland, one of three countries lacking the wherewith to overcome onrushing financial collapse (currency as well as banking). The other two were Latvia and Greece.

In Latvia, just as in the US and the UK, working class families and strata in the middle (small owners, professionals in the state sector and those attached to larger capitals) were attracted, and encouraged to borrow on existing personal property (homes, apartments) or to move from renting to personal ownership. Swiss and especially Swedish banks, from whom Latvian banks borrowed, were heavily albeit mediately involved in this lending. But it was not done in the domestic currency but, at a marked exchange rate advantage, in (cheaper) foreign currencies like the Swiss franc, in Euros and even the (Japanese) yen. As the financial crisis deepened, in a global context the weaker national currency, the *lat* (LVL), rapidly slide against those foreign currencies (by over 30% between September 2008 and February 2009), and in real (Latvian) terms the ensuing debt became unbearable. Ultimately borne by borrowers, the costs of that borrowing in an immediate way threatened to destroy the Latvian banking system.

The Latvian state quickly nationalized the second largest bank in the country, Parex. Fearing Latvian loan defaults, Swedish banking demands were merciless and relentless. Like Icelanders, the last hope of the Latvian bourgeoisie was the IMF, which granted a 7.5 billion Euros loan (again similar in amount to Iceland, which was \$5 billion). Terms

³⁹⁹Begun in November 2010 and ending in June 2011, this was the second round of qualitative easing, QE2, in which the Federal Reserve purchased \$600 billion of US Treasuries.

were onerous, much on the order of its, the IMF's, structural adjustment loans in the capitalist periphery. Only in Latvia, about everything that could be privatized (outside Parex) had been in the decade following the collapse of the Soviet Union. Austerity was (as it would shortly be elsewhere) the order of the day. Unemployment which had stood at 7% in December 2008, had more than tripled, inflation spiked and overall economic activity contracted by 18%, all by the beginning of 2010. Public employees (in a small state sector) lost work and incomes, a layer of the private sector working class (in Latvia there is some industry related to German autos among other things), and layers in the middle such as among small retailers among the business classes lost homes and apartments to the devaluation of the *lat*; a shake-out ensued with enough devalorization that by spring 2011 signs of a rise in economic activity had been noted.

Greece was different, first, in that it was subject directly to the European Central Bank, to German bankers whose loans were at greatest risk. Greece had a large public sector and high debt levels. (The former has been dramatically shrunk without, of course, materially effecting the latter). The debt levels had historically been low (a long-term consequence of the savagery of the reign of the colonels, 1968-1974), for it was only after Greece entered the European Union (2001) that they began to rise. As one of the terms of entry, the wage-earning packet increased markedly as a consequence of that entry (bringing Greek wage structure more in line, but not in line, with the core EU countries, Germany, France, Belgium, Netherlands). Yet labor productivity did not. Both stagnating productivity and increased consumption of imported goods were masked by capital investment accruing and growing also a result of entry. But once the financial crisis emanating from the United States, and transmitted by the network of relations linking German and Swiss banks to US ones, was felt across Europe, and accordingly as trade plummeted so did investment flows into Greece. Second, belonging to the EU, the Greek state did not have the option of devaluing its currency to make its wares more attractive in global exchanges while making debt payments in a devalued currency. This was the basic situation which confronted Greek governments after 2008, and it was vastly exacerbated by the German and French bankers who dominated the decision making bodies of the ECB. Greece was subject to three "Economic Adjustment Programmes" negotiated with a joint group, the "troika," the European Commission, the EBC and the IMF. Again, it was large financial capitals which hegemonized this group through the EBC.

The first "adjustment" loan was €110 billion designed to permit the Greek government to repay outstanding foreign bank loans (which were investments in bonds the state had floated), while financing ongoing state deficits. It was contingent on austerity measures aimed specifically at workers (wage cuts and freezes, benefit cuts), structural reforms (which in a way were really an EBC effort to install its own accountants, bean counters and policy wonks inside the Greek finance ministry) and privatization of government assets which were extensive (e.g., docks and warehouses supporting a large shipping sector, public transportation). The loan covered a period from January 2010 to June 2013. By 2012, a second "adjustment" program was already being negotiated. In February 2012, the Greek government again accepted the Troika's draconian terms including more privatization and deeper cuts in public sector employment. A very much larger, €240 billion loan was accepted the same month, monies to be parceled out (not granted all at once) in the entire through to December 2014.

In December 2012 the Troika provided Greece a relative small debt relief package, while the IMF extended an additional €8.2bn in loans to cover the period, January 2015 to March 2016.

By 2014, however, stripped and robbed of assets by austerity, sliding still deeper into recession after a slight "rebound" in autumn 2014, the new pressure forced the PASOK, in European terms a left-center party (i.e., moderately rightwing), to call for snap parliamentary elections. Syriza, a party of the left (i.e., a socialist party with a sprinkling of Marxists so-called, a party to the left of contemporary social democracy), came to power on a platform rejecting existing bailout terms. In response, the Troika abrogated all approved aid to Greece in the pipeline, so to speak. The remaining three years of bickering, abandonments of negotiations, technical extension of existing loans, a referendum on the bailout (rejected on 5 July 2015 by a margin of 61%-39%, with a 62.5% turnout), (idle) threats of a Greek departure from the EU, and Syriza's caving and acceptance of Troika terms (12 July 2015) for a third "adjustment" loan lasting until August 2018, is a sad story and does not bear repeating here.

One later development and early, yet characteristic feature of this dance between ruling groups in Europe and governing parties in Greek does require noting. A couple times in the three years, 2015-2017, the EU granted additional "credits" of 9.5 billion and 8.5 billion (these figures expressed in US dollars), largely a reward to Syriza for falling into line with Europe's great bankers; that is, for enforcing an austerity that had already long been devastating. Between 2009 and 2011, the austerity measures had reduced the state deficit from €25 billion to €5 billion (11% of GDP to 2.4% of GDP) in 2011. As we already suggested, during this period recession deepened (only to deepen more later). Thus, between September 2008 and November 2011, Greek unemployment had grown from 7.5% to 19.9%. Yet on 13 July 2017 Syriza was promising to further changes in labor laws, a lid on public sector work contracts and more reductions in pensioner benefits.

On 21 June 2018, European bankers agreed to a 10-year extension of maturities on nearly €100 billion of loan; and in March of the following year (2019), Greece sold 10-year bonds for the first time since 2009, indicating in capitalist terms it had exited its prolonged, torturous period of crisis.

Resistance to Capital

Among the casualized in the old metropolitan centers, the struggle against capital since the onset of the financial crisis varied in its content. It has included elements that characterize the mass worker subject to continuous flow production (a purely subsidiary form of labor in these centers), but it also asserted itself, in particular, in increasingly dominant forms of mass public assembly. This should be understood in terms of the mutual penetration of the underemployed and precarious with the unemployed, and with lumpen elements. This struggle does not appear capable of generating stable organization forms (workplace and neighborhood assemblies as ongoing concerns, not to mention anything like councils), though it has had its own theoretical expression in the *communistes* (expressing a dialectically deepening awareness), yet, by itself, does not appear to be able to mount a sustained challenge to capital.

The same situation obtains *mutatis mutandis* in the regions of global capitalism (Australia, Brazil, Chile, etc.) where, having undergone re-industrialization as consequence of relations to the industrially dynamic East Asia, casualization is pervasive. This should be clear from the most advanced forms of struggle that have appeared over the past decade, the situation circa 2002 in Argentina with the *piqueteros*, or again with the assemblies on Syntagma Square in Athens. It is for this reason that these assemblies (the first appearing in Athens in early December 2008), and the forms of protest it has given rise to... characteristic of the entire historical period which has followed on the decline and largely the disappearance of Fordism with workers massed along assembly lines and as a "regime of accumulation," in other words, with the capital's movement beyond the factory and continuous flow forms of production as the universal type of productive activity... are rightfully subsumed in the term, the "era of riots." *The riot, as we know, is historically in its urban forms distinctively plebeian, not industrially proletarian. It rises merely to rebellion, and is not distinctively revolutionary*, i.e., capable of overthrowing established power and reorganizing society as a whole, and this without respect to the fact that the assemblies as the political form linked to the riot are participatorily democratic, structurally horizontal and leaderless. They (the assembly and the riot) are expressions of the basic form labor takes today, ubiquitously and globally within capitalism, of *casualization* (i.e., low-waged, unbenefted, unorganized and part-time labor) whether is the labor of migrants, piece-rate workers, retail employees (inclusive of food service, hospitality and entertainment), contract workers or even industrial workers.

And where struggle has also appeared in the immediate peripheries of the old metropolitan core that combine limited industrialization, a massive "informal sector" given over to the extraction of absolute surplus-value and a large militarized state presence that is responsible for whatever development obtains, the Maghreb for example (Syria, Tunisia, Egypt, Libya, Bahrain), it has not gone beyond massed demonstrations calling for an end to political tyranny and the establishment of democratic forms on a popular bourgeois (*sans culotte*) model.⁴⁰⁰ In areas where unemployment has over the course of the long depressionary aftermath of the financial crisis been the highest (in Spain, in the Balkans inclusive of Serbia, Kosovo, Montenegro, Bosnia and Herzegovina, Macedonia and Albania where unemployment of youths under 25 years in every case reached over 50%), in China, in Yemen and Jordan (all where well educated youths cannot find capitalist work), the model, the riot has been renewed, permitting further characterization. *The riot is, absent political demands, without other than transient organization*, and in some instances (in summer 2011 in the impoverished districts of central London, Birmingham and Manchester) in important respects (i.e., flowing from the subjective compulsion to fulfill oneself in possession and disposal of money and commodities) a *mirror image of the looting and plundering that capitalist social groups (speculative investors, stockbrokers, etc.) carry out daily*. As it spread across the United States, and then into other parts of the capitalist metropolis, Occupy Wall Street was perhaps the last major expression of this form of resistance to capital. This form, that is, as an expression of the objectively social and historical position of the casualized, many among whom have expectations, viscerally part of their formation and being, of a far better form of life.

In all this there was one event that was unique. It was the struggle in Madison, Wisconsin (USA) in February 2011. What was unique involved the nature of that struggle and how it was launched.

On a Friday, 11 February, Wisconsin Gov. Scott Walker announced he would introduced a bill into the state legislature. Among its provisions, it granted state officials the right to arbitrarily fire workers who partook in any "organized action to stop or slow work" (such, ironically, as was then going) and who were absent for three days or more without employer approval. Those workers immediately and directly affected by the bill included state office and state hospital wage earners (there was and is a large concentration of both in Madison), teachers statewide, workers employed by the University of Wisconsin (there are roughly a dozen campuses in the state) and its hospitals, childcare and home health workers who were employed in the public sector, and, perhaps surprisingly, some who

⁴⁰⁰These events, by the way, were determined in a complexly mediated manner by accelerating climate change:

The western Russian wildfires of summer 2010, resulted in a poor wheat harvest and an upward push on the world price of grain. This, in turn, was at the origins of the explosions in the Maghreb, where huge state imposed, overnight rises in the costs of subsidized food (and fuel) stemming from global commodities (here wheat) price inflation was immediate motivation for taking to the streets in protests, action that developed into mass demonstrations, and devolved into "regime change" at the very top, political revolutions or, if you prefer as we do, military coups.

were dubiously proletarian, in particular, state prison guards. Not surprisingly, some of the provisions (i.e., those eliminating collective bargaining) in the end did not apply to front line repressive forces, local police and state troopers (and, not part of this characterization, to firefighters). The bill also intended termination of health care coverage and pension benefits for all temporary workers so-called employed by the state, and this included graduate student teaching assistants and researchers.

Wisconsin was one of forty-five US states which had budget deficits. Unlike the national government that, under the auspices of the Federal Reserve in conjunction with the Treasury, could and does print money endlessly to cover its debts, the states are mandated by their own constitutions to (bi)annually balance their budgets. The rightwing, crypto-fascist governor, Walker, himself estimated the Wisconsin deficit at \$137 million for the rest of the current fiscal year, and \$3.3 billion for the next two fiscal years. (The state operates with a biannual budget.)⁴⁰¹

Where the Wisconsin budget deficit was not engineered, it was seamlessly a piece with the global crisis of capital manifested most forcibly in the collapse of Lehman's in September 2008.

But what is important for us was the character of a mass working class response to the governor's legislative proposal.

Led by graduate student assistants, there was an immediate response from the UW campus: Some 1,100 people showed on the state house floor on Tuesday, 15 February, the day the bill was first discussed in the lower chamber. What the governor and his party thought would be a cakewalk turned out to be a marathon session (some 17 hours). By late afternoon about 15,000 people overflowed the legislative assembly, the state house grounds and the immediately surrounding four streets that about those grounds forming a square. Clearly not just students. Teachers, hospital workers, and officer workers from the various Cabinet agencies, departments of state government and medical facilities that were within easy walking distance of the capitol building, all public sector workers, all were present. By late afternoon, the huge capitol rotunda did not accommodate all those who attended as that crowd of roughly 15,000 flowed out into the state capitol steps and grounds.

The true dimensions of working class disaffection and activity began to really unfold as Madison had become the epicenter of a vast outpouring of working class anger and outrage. But it was not just Madison. Already on Tuesday the 15th demonstrators in Eau Claire, Milwaukee and Superior had gathered at state office buildings to demand the bill be scuttled. In Appleton in the Fox River Valley, high school students had walked out of school in protest the same day. The following day, in Madison the school district superintendent was compelled to cancel classes because absenteeism was so high. It was on this day, 16 February, that the real character of the working class activity began to emerge: Student absences and teacher "sick outs" had started to rapidly spread. By Thursday, walkouts at high schools had occurred in Eau Claire and La Crosse in the west, at Appleton and Green Bay in the northeast, in Milwaukee in the southeast, in Madison of course, and in array of small towns and schools districts all over the state. In the towns and small cities close to Madison, schools were shut down and students and teachers "marched on" Madison; that is, they got in cars, vans and buses and drove to Madison. This was largely where the numbers of people were coming from. If teachers' motives for informally striking should be clear, high school students may not. But confronting disciplining from school authorities, their action should not be simply dismissed as a function of "cool" or mere adventure: A good deal of the high school students, in particular those from the small outlying towns had parents, who as sanitation workers, drivers, transportation workers, clerics in the towns and counties and, to be sure, as teachers, had everything to lose if Walker's bill became law. Thursday saw another surge in absences among teachers. Workers, especially teachers, and students were pouring into Madison in what was starting to take on the character of a strike wave which in the historical context of global casualization, uniquely difficult conditions, constituted a *mass strike* as described by Rosa Luxemburg early in the epoch of real domination.⁴⁰² In an era of casualization, undersized capital-intensive productive units fully competitive with residue big factories of the Fordist era, vastly smaller and non-unionized workforces, an era in which the few remaining mass organizations of the proletariat are under a sustained attacked justified in the name of capitalist austerity, what else would a mass strike look like? It was largely "spontaneous," that is organized by students and teachers themselves, and it was snowballing. The whole situation centered in Madison had become a major class confrontation, almost exclusively a working class event; it was the largest proletarian action in the United States in decades; and each new day it was drawing new layers of workers in what in effective was a strike wave led largely by students and teachers.

A general strike may have been possible in Wisconsin right on the heels of the massive teacher-student "wildcat." (It was a term widely used then, but one that vastly underrated these events). Beginning on Wednesday 16 February through Friday, the largest school districts in the state had been closed down, and classes canceled for a quarter to a

⁴⁰¹Unlike the situation in many other US states and capitalist countries around the world, the fiscal "crisis" in Wisconsin was largely manufactured: Walker was sworn in as governor in early January 2011, and within days, he, together with the legislature, had enacted a series of revenue giveaways to the business classes and taxes cuts for the same. Half the projected budget shortfall was a product of this legislation. The balanced budget provision in the fundamental law so-called is, we note, a mighty weapon that is periodically wielded to discipline the working class under the rubric of austerity.

⁴⁰²*The Mass Strike, Political Parties and the Unions*. London, 1986 (1905); and Henriëtte Roland-Holst, *Die revolutionäre massenaktion. Een studie*.

third of all students in the state. From Wednesday through Sunday, the rallies in Madison grew... 20-25,000, 30,000, 40,000, 70,000, 100,000....⁴⁰³ A general strike may have been possible, and, considering what was at stake for the workers and students actually involved had the issue ever been given a thorough airing in the continuous discussions going on down on the ground, it certainly would have appeared worth whatever risk it might have entailed.

Yet nearly all those involved in revolutionary milieus were asking the wrong questions about these events, making wrongheaded analyses of them, and obviously drawing the wrong conclusions. *There was* an opening there in Madison, an opening to renew open class struggle in the United States on a very large-scale. (And, of course, if that opening had been enlarged, it would have had international repercussions.) It was an opening that was lost, certainly to the ostensibly revolutionary left, since it was only a handful of anarchists in the mass assemblies who were, *without explanation*, passing out fliers calling for a general strike, even as talk of a general strike was in the air. But, then, who would have called a general strike? Who would have forcefully posed it as a course of action worth pursuing? Who would have argued a revolutionary perspective and stated clearly, expressly, what was maximally possible in all these developments? To pose this question is to grasp the real limits of the movement. These limits, though were not just a certain affinity of the largest layer of public sector workers in Wisconsin for the Democratic party. They were also product of the debilitating effects of contract legalism on the awareness of workers, of decades of defeats in large-scale class confrontations dating back to 1982, and the absent of a historical memory of militant, combative traditions and struggles assiduously cultivated by unions and the Democratic party so many of the workers present were committed to, and, finally, the absence, at that moment going back 77 years, of a revolutionary and communist current within the working class, its various layers and sectors, in the United States.

In the end, the lack of a revolutionary perspective on what was maximally possible in this situation killed any opportunity to defeat Walker's bill. The unions and the Democratic party demobilized the movement, canalizing it into a legal and electoral struggle. Eventually people had no choice but to return to work, students to school. As pressure on the legislature dissipated, the bill was passed and signed into law. It constituted a major class defeat, the first to date by far and away the most significant in the era of riots and worker casualization. As such, it *accelerated that casualization* in the United States, where other state legislatures enacted similar legislation subjecting public sector workers in large areas of the country to what is nearly universal in private sector work. (In Columbus, Indianapolis and Nashville, the state houses of Ohio, Indiana and Tennessee, and at least three other states, bills very similar to that in Wisconsin were *immediately* passed, signed by the state executive and became law.) It destroyed the last remnants of an increasingly irrelevant vision of social life that once formed around mass work in the Fordist era (public sector unions were fully the complement of private sector unionization in mass production industries, even if at this moment their last residue); it demoralized and atomized another large layer of workers, echoing defeats of the nineties (Greyhound, Caterpillar, Bridgestone/Firestone, Stanley); *and set the stage for the rise of Trump on the back of surging neo-Right, increasingly neo-fascist activity, offering protectionism, nationalism and xenophobia with a not so subtle racist subtext, and not just in the United States, as a dominant "narrative" orienting masses of people to the future.*

The Long Depressionary Aftermath of the Financial Crisis

The situation in Greece has been offered as an instantiation evidencing a long depressionary aftermath of the financial crisis. Inadequate reflection on this situation might suggest the Greeks suffered unusually longer than any national or social group elsewhere, even if, say, ruling class austerity programs in one degree or another produced various forms of degradation of popular, and particularly working class, living standards. After all, a shakeout of banking institutions never proceeded beyond an initial phase, and large capitals did not undergo any real devalorization.

Above, we got as far as QE2 ending in June 2011. Fifteen months later, the vaulted recovery had decidedly ground to a halt. On 13 September 2012, the Federal Reserve inaugurated a new \$40 billion per month purchasing program, this tied to mortgage-backed securities. Valued so low, essentially worthless, no venturesome capitalist had been willing to take those bad loans out of the hands of banks which had continued carried off their balance sheets. This was QE3. Interest rates which had been near zero for three years (itself a certain sign no recovery was in the offing), were moreover, the Fed announced, to remain their at least through 2015. In December (2012), the Fed chair indicated those open-ended purchases were to rise from \$40 billion to \$85 billion a month. In other words, the weight of those toxic assets was so great, financial institutions in so much need of relief, that even with near zero interest rates, the extension of credit required massive infusions of cash in order to increase its volume. Little borrowing was going on, economic activity simply was not self-sustaining. Announcement of a "taper" (scaling back on bond purchases), June

⁴⁰³Had the strike been called at the rally on Sunday, these prospects would have opened up: Beginning the following Tuesday (22 February), and starting from the schools, the state and municipal offices, and hospitals in Madison and the surrounding communities, in our considered opinion it would have effectively shut down the public sector in the state, curtailing all capitalist activity within days, say by Thursday. The pressure would have been enormous, and Walker would have withdrawn the bill; he would have been hamstrung; a space for genuine struggle would have appeared, and a "model" for forceful working class response to austerity would have been created and visible across the country. In the longer run, perhaps a genuine proletarian politics could have emerged.

2013, was premature. In September, the Fed reassessed its anticipated action, but in January 2014 began its scaling-back. In October, purchases were halted, with a Fed balance sheet of \$4.5 trillion in junk assets. (If one wishes to think these actions were confined to the United States, the Bank of England, the European Central Bank, the Swiss National Bank and the Bank of Japan all engaged in similar actions during the same time span.) The ECB and the Bank of Japan went considerably further in buying corporate assets of firms listed on their respective stock exchanges, the action of the latter continuing to this day.

In the United States, the Republican tax cut at the end of 2017 itself argues for the necessity of adopting this position; and, while, in fact, there was a short period of growth, it has since come to an end. Industrial East and Southeast Asia are in recession. Unwinding slowly, this situation reaches back to August 2018. International trade is the surest indicator, and from the point of view of this region China is the center of the world. Exports to China began sharply declining last November. Most recent figures show on a year over year basis, Japan's manufacturing exports to China fell by 9.4% in March, Singapore's by 8.7%, Indonesia's by 22%, Taiwan's by 27% and the Korean South's by 8.2%.⁴⁰⁴ Thailand, Vietnam and Malaysia did no better.

We might also do well to pay attention to the "spillover effects" of East Asian contraction in Europe. Germany exports a significant portion of its technologically sophisticated machinery to China, and at the heart of the European economy the German export sector had been sharply contracting for the previous four months. The European Central Bank and the national components of the EU banking system, Italy, France and even Germany (Deutsche Bank, Dresden), were, and continue to be in disarray, Italy hanging together by a thread; the European Central Bank no longer has the financial wherewithal to withstand what bourgeois economists like to call "contagion."

US tariffs and sanctions accelerated a global slowdown that was... we are referring here to the situation at the end of 2019... due in large measure to debt saturation. Having withdrawn from and effectively killed the nuclear treaty with Iran and the toothless Paris Climate agreement, the Trump Administration threatens to sanction any nation which does business with the Iranians. The Europeans had signed on to the treaty with Iran in the first place because it meant expanded investment and trade opportunities. Those have been lost, marking a minor point of acceleration in a slowdown, which effectively is a continuation of the situation, with a slight pause, in summer 2014. Russia has been sanctioned for its alleged intervention in the US 2016 national election. Whatever rapport Trump believes he has with Putin, the Russians responded in March to May last year dumping all the Treasury bonds the Russian central bank was holding (\$81 billion worth). Mark a minor uptick in de-dollarization. The Trump Administration has banned US firms from using Huawei fifth generation (5G) technology, further bans have been on placed Hanagzhou Hikvision Digital, Zhejiang Dahua and Iflytec, high-tech surveillance companies, and five dozen more affiliated high-tech firms.⁴⁰⁵

These are large Chinese capitals that operate internationally. The South China Morning Post calls it a "tech cold war."⁴⁰⁶ Mark another, larger inflection point in the long depressionary aftermath of the financial crisis.

The real question is twofold. First, consider the recession in East Asia, the effects of a British withdraw from the European Union (Brexit) which is now transpiring, and the US tariff and sanctions regime, particularly the trade war with China. Taken together will they deepen what is a global recession? And before you give yourself an answer, remember all of this overlays *worldwide debt saturation*. Second, in the event, there is an ideologically mystifying question of whether such an event is merely conjunctural, a long overdue downturn in the business cycle that Keynesians have managed more or less successfully, more than less, for the past eighty years. If so, then consider the rates of growth (GDP) since 2010, and consider them in relation to *real* inflation, not the cooked figures that emanate from the agencies of the state, here the US state, but a genuine measure that deploys the methods of statistical analysis that the same agencies used prior to the moment at which they realized generalized speculative finance is in essence inflationary.⁴⁰⁷ Consider those growth rates, ranging from 1.5% to 3.5% annually, in relation to real inflation, which has ran from 6.5%-8.9% annually for a decade. Effectively, the comparison patently, statistically, indicates that the US economy, and *mutatis mutandis* the rest of the world capitalism, have been *contracting for the past decade*.

The current situation reaches back to the financial crisis, or more adequately to all the irresolvable problems of capitalism the financial crisis manifested and highlighted. There is connective tissue here, between the current situation and those irresolvable problems brought to light by the financial crisis. Among other things, there are an astounding number of large capitalist firms which don't invest their returns productively but instead engage in stock

⁴⁰⁴Gordon Long, "Macro Outlook: May 2019" (video).

⁴⁰⁵Edna Curran and Chris Anstey, "Full Blow Trade War is Quickly Shifting from Risk to Baseline" (22 May 2019), online.

⁴⁰⁶"Tech Cold War: How Trump's Assault on Huawei is Forcing the World to Contemplate a Digital Iron Curtain" (26 May 2019). Online, search under article title.

⁴⁰⁷There were actually two moments, one in the 1980s, the other in the 1990s, when the measures estimating inflation, the consumer price index (CPI), were transformed with the intent of adjusting the figures downward, both to reduce pensioner benefits (Social Security) linked to CPI and to propagate a view of general economic health by way of media spectacular propagandizing. See John Williams, "Public Comment on Inflation Measurement and the Chained-CPI (C-CPI)," April 8, 2013. Online at <https://www.ShadowStats.com>.

buybacks (feathering the nests of their largest shareholders and very thin layer of management right at the top). These firms are deeply in debt and, without central banks printing vast sums of money since 2009, they would be belly up. Bourgeois economists have a term for them, and in terms of mass culture it is fitting. Zombie corporations. As of May 2019, there were 536 today, between 1 in 7 and 1 in 8 of every large international capital in the world. That's a full 13% of that total, and 86% of the same number at the height of the financial crisis.⁴⁰⁸ A whole lot more are dangerously close to becoming zombies. What this suggests is that a vast global shakeout is in the making.⁴⁰⁹

Summary and Conclusion

The more credit issued, the more fictitious claims to surplus-value, the greater the pressures built in the reified system of social relations to realign those paper titles with the actual production of surpluses. At a certain point (9.2008), this pressure became too great to contain. Thus, the financial crisis.

Since 2008, a falling rate of profit masquerading as the slowing rate of growth in the world economy has become the central problem of global capitalism. So in what forms has it, largely hidden, become obliquely visible?

In this gargantuan expansion of credit, as the Federal Reserve indicates, starting from (Nov.) 2010 (Q2) in which total credit (all sectors, including debt securities, loans and liabilities) owed in the US amounted to \$1.70587 trillion, it has grown in 2019 (QE4) to \$72.795071 trillion;

A falling rate of profit is indubitably hinted at in the stagnation of productivity, in the slow cumulative shrinkage of saving, and more forcibly in inflation adjusted (i.e., real) wage decline;

it is obliquely visible in the rules rewritten by national states to hide the insolvency of large financial capitals, most patently in, first, permitting banks to forgo valuing their assets (e.g., mortgaged homes) with respect to what they would actually bring, and, second, in allowing the same to place worthless assets off their balance sheets;

but this created new problems of liquidity, so a falling rate of profit is further hidden yet manifest in a half decade of printing enormous sums of money without reference to the production of goods, fiat currencies generated by quantitative easing, which partially abandoned is now marking its return;

beyond this, it appears in the simply extraordinary additional central bank efforts to insure liquidity to financial capitals, zero interest rate and negative interest policies, now the core monetary foundations of global capitalism, to ease borrowing to continue equities investing to hold up stock valuations, i.e., to prevent their collapse (a la 1929 and 2008, in which devalorization led to systems collapse);

it is hidden, yet present in now ubiquitous corporate stock buybacks (debt for equity swaps) as the cheapest way to "add value" in lieu of productive investment;

and, a falling rate of profit characterizing capitalism as a global system if not manifest is evidenced by the 536 largest international capitals, one of seven to eight in the world in May 2019, which at that moment were zombie firms.

So what conclusions can we draw?

First, with the appearance of fiat money, who or what arbitrates the value money-capital represents?

⁴⁰⁸Long, "Ibid."

⁴⁰⁹As the global coronavirus pandemic has demonstrated.

The COVID-19 outbreak is no "black swan" or one-off event, something extraneous to capitalist development; to the contrary, it is grounded in the very movement and logic of capital, namely, in the spatial (geographical) expression of that logic. Capital, as self-valorizing value, is a limitlessly entropic force. That self-expansion, valorization, relentlessly requires the deeper and deeper penetration of existing and creation of new terrain, venues and markets to exploit and realize itself in:

Prosaically the search for markets, and dialectically and concretely, the "pressure" of the law of value embodied in and driving the commodification of nature as "exploitable resources" is wreaking havoc, vastly upping, disease transmissibility. *Habitat destruction and with it the loss of biodiversity transforms forest, wetlands and marshes, and other settings on the Earth hitherto not subject to human remaking (i.e., increasing commodification of nature)* into monocultural cropland, into roads and highways, and into zones for construction of industrial, commercial and residential structures; it vastly simplifies (where not destroying) complex ecosystems; and, in so doing, we have crossed a line, driven down the ecological niche and milieu thresholds so low that, statist interventions notwithstanding, these natural setting can no longer provide their own immanent barriers (their sheer density and inaccessibility, microbial viral predators) to transmission, cutting pathogens loose from their own very specific ec niches while making ourselves available as a domesticated humanity as hosts. Even the wildest subsistence species are being corralled, and being sucked up into capital's market expansion of exotic meat. These include beavers, alligators, crocodiles, porcupines and bats. Witness the civet and the officially recognized as endangered pangolin. Site by site, region by region and species by species that Earth is plundered and denuded (in the sea as well as on land, one need only think of longlining and gillnetting). In bourgeois terms, the "value" of the reside has actually risen. Demanding access roads, logging and mining have historically led the way. Following them closely, perhaps more damaging, large agricultural capitals employ tree cutting timber outfits which carve up these regions, moonscaping forests (clear cutting by way of gigantic tractors that, chains affixed to tree trunks, rip them from the ground, canopy, trunk, roots and all), leveling hills large and small, filling in gullies, ravines and valleys, obliterating the diversity, complexity and organization of those forests, wetlands and other natural settings which otherwise limit pathogenic transmission, qualitatively increasing the chances of exposing, acquiring and spreading a new pathogen. Important for the perspective formulated in this note is Rob Wallace, *Dead Epidemiologists: On the Origins of Covid-19*. New York, 2020.

David Harvey states, "If the metallic 'pivot' (i.e., gold) to the whole monetary system disappears, then what replaces it? The answer is the world's central banks in combination with state regulatory authorities."⁴¹⁰ Though correct, this is not a particularly insightful answer since the injection of the state into the circuits of capital (and with it, establishing a role for the central bank vis-à-vis the same) was first announced in the Great Depression, nearly a half century before the gold standard was finally and completely abandoned.

Second, the state is central since its presence within those circuits is decisive in initially stemming the crisis as indicated in 1933, 2008, and 2020. However, it should be noted, it is not as if the state and central banks are not interlocked - not just in terms of the legislative mandate the state gives the central bank in each crisis, but in an ongoing way. Take, for instance, following upon the breakdown of the pattern of state to state relations (China and the United States) formed in the boom leading up to the financial crisis described above, i.e., after 2008, Treasury auctions have not been all that successful. The failure to raise adequate funds to finance US debt might well have led to renewed collapse, so the US Treasury and the Federal Reserve in a convoluted, largely dance in which the former, in hidden fashion, has essentially bought back its own debt. (Talk about a hyperinflationary measure!) This is accomplished through the Exchange Stabilization Fund at Treasury.

Third, the infusion of vast sums of money into the great banks (and, ramping up in 2020, beyond that now the purchase of corporate bonds and other private assets to keep large capitals afloat) in order to provide liquidity to the "market" (to essentially insolvent firms, zombie corporations, etc.), i.e., prevent credit from freezing up, occurs at each interval (QE1, QE2, QE3, QE4)⁴¹¹ in increasingly large amounts with decreasingly smaller results, i.e., with less and less expansion after each round.

So that, fourth, we witness fiat money printed without end to give the appearance of "growth" in a system which is contracting. (Phenomenally, as we indicated, this can even be seen in the shrinking rate of growth, a cooked figure, proclaimed each year in the United States, which comes in well below the rate of real inflation.)

Fifth, at key, nay decisive moments (at the very height of crisis), the US Federal Reserve has acted as central banker to the work, even as at other moments other central banks have followed its lead with respect to domestic economies.⁴¹²

Sixth, barring a revolutionary outcome in which capitalist power is overthrown, this cannot other than end up in a series of slumps, a grand slump or renewal of interimperialist world war, each and all objectively terminated with a massive devalorization, the last perhaps too horrendous to fathom.

⁴¹⁰A Companion to Marx's *Capital*, Vol. II, 215.

⁴¹¹Discounting a brief period in September-October 2019 when the Federal Reserve injected large sums of money into the banking system to stabilize it and Treasury-banking relations after a major financial capital dumped several billion dollars worth of Treasuries on the open market, QE4 began in March 2020 with a massive buying program (that includes purchase of corporate bonds) to stabilize the financial system after the coronavirus lockdown created an instant credit freeze. To date (it's mid-October 2020), the Fed has pumped in over \$6 trillion dollars into the capitalist economy as a whole by way of its purchases.

⁴¹²Here we would note the singular exception of the Bank of Japan which has "blazed a path" in the purchase of toxic assets, e.g., being the first to acquire bonds of private firms and place them as assets in its portfolio and on its balance sheets. It is commonly remarked today the Japanese central bank owes about a quarter of the stocks traded on the NiKi index.

The General Tendencies of Capitalist Development

Financial Crises

Return to capitalism as a unitary, global reality. At this level, it is precisely this surplus, "s," that is required to sustain the social totality in view of the losses that incur to "v" and "c" during a cycle of production. Call this expanded production. This is not unproblematic.

Since various capitals, the process of production and circulation, and consumption too, are an interconnected network, and, as each capitalist pursues a competitive advance through technical innovation, since any increase in the productivity of labor in any part of the worldwide system effectively forces (or sooner than later will force) a reduction in socially necessary labor-time embodied in the value (expressed as price) of commodities produced on the basis of that innovation through the entire system, then the lowering of socially necessary labor-time, and with the quantitative decrease in the value embodied each and every commodity so produced is continuous except in situation of a crisis (which is precisely what tendentially this entire development leads to).

What is happening? Lower socially necessary costs are embodied in new technical inputs to production, in machinery that once set in motion by abstract labor (that is, through the labor-power of living, breathing workers) increases the productivity of that labor. Accordingly, it lowers the quantity of value embodied in commodities that are produced under these conditions, or increases the sheer mass of commodities produced in the same amount of time that was required to produce a smaller mass under conditions of production prior to the introduction of the new technical input (the new machinery). In phenomenal terms, the product can be sold cheaper. Effectively, the firm operating with these new technical inputs has rendered the machinery of all other firms which sell the same or similar products obsolete. Those other firms, however, continue to value, in their profit and loss statements they continue to price, that machinery at the costs of purchase, the historical valuation but not its current valuation. *Without regard to credit and its issuance, this creates a situation in capitalism in which fictitious accumulation of necessity occurs:*

These "local" determinations of the "book value" of primarily fixed assets accumulate throughout the economy. This means there are firms in each and every industry and sector whose valuations are not aligned with the socially necessary costs that are required for production of commodities in the economy as a whole, call it a general valuation. The book value assigned by capitalists to their capitals is, in other words, above that of the general, current valuation. Yet discrepancies between valuations of individual firms and general valuations of the same individual capitals must sooner or later be reconciled. They do, in fact, get reconciled through a crisis. This is devalorization. Historically, up until at least the first imperialist world war, capitalist crises realigned book valuations and the general evaluation by enforcing devaluation or devalorization on capitalists. (In the language of the business classes, capitalists experienced a "shake-out" as some went "belly up" and simply disappeared.) Until the thirties of the last century, known as the "Great Depression" with its three deep troughs (1873-1878, 1882-1884 and 1892-1896) the whole period from 1873 until 1896 is the classical example in this history of a generalized devalorization.

But in the boom phase of a capitalist cycle it is this growing disparity between book valuations of capitalists' capitals and their general valuation (with a view to the economy as a whole) that obtains. While we can say (as it will be become clearer later) that, for the capitalist (each and every one of them, each and all of them pursuing their own individual interests), this technical innovation in capitalism aimed at increasing the rate of profit on individual capitals, effectively creates more capitalist claims on or titles to the total surplus-value that circulates than can be satisfied, so that a portion of those claims are necessarily fictitious. The fundamental situation is, one which is operative among individual capitalists themselves, the pursuit by (some among all) capitalists of technical innovation without some overriding coordination that allocates resources to capitalist firms and eliminates competition, what Marx calls "anarchy."

Inasmuch as technological change within capitalism creates and then exacerbates this anarchistic and localized situation and its development, there is already a fictitious element within capitalism (which can be represented as whatever quantum of disparity between books and current evaluation exists), and it too (like capital itself) accumulates.

The fictitious accumulation of claims on surplus-value culminate in crisis in this way: The capitalist's fixation on his own capital... it is necessary for he wouldn't be a capitalist if he behaved otherwise... creates the situation as it exists on the ground: The system of property titles which exceed valuations determined by actual quantities of socially necessary labor-time embodied in fixed capital, nay in constant capital generally, is itself a byproduct of the rising organic composition of capital. It feeds the diversion of money-capital into financial speculation, which, in turn, feeds on itself. So that this growing fictitious accumulation leads inevitably to a general monetary crisis.

This account of capitalist development at this point clearly anticipated the renewal of a general crisis of capitalism manifested in a monetary crises which, beginning from the collapse of Lehman's in September 2008, has yet to exhaust itself...

The whole issue turns on the question of what "happens to the reproduction of capitals when the assumed value of those capitals outruns their objective basis?"

Before any new inputs (machinery, raw materials, etc.) can find their way into production those inputs must have been produced and, having emerged from production as commodities, sold. Before there can be any further production, consumption or accumulation, the value of commodities must be realized in exchange... Logically at least, for actually the processes of production and exchange (realization) simultaneously occur at countless sites and moments throughout the capitalist economy... Between production and exchange stands credit, that is, the banking system: Within a cycle of production, in order to purchase raw materials, necessary components that permit finishing production of some goods, in order to install a new instrument or machine to meet or better the competition, the capitalist goes to a bank and borrows on existing plant, equipment, inventory or future products (those portions that are not already mortgaged). Larger firms operate from a "cash flow," e.g., they pay for wages and salaries, high turn inventory items, administrative and incidental expenses, etc., out of the proceeds of their ongoing operations, but when they expand, they may or may not turn to "their bank." If not, they issue stock... Like state bonds, mortgages of all sorts (today, especially in consumption, in the purchase of housing), stocks can be discounted (purchased at some price less than their full face value), and either individually or bundled, then resold. The resale generates a sometimes not so narrow margin of profit for the original purchaser. They can be combined with other stocks, bonds or mortgages (and mixed as well), and resold again and again. In the simplest of cases, these arrangements are not made in cash all at once, but "on time," on a schedule of payments. Even here, they can be leveraged: The resale generates the income or cash flow which permits periodic payments on the original purchase(s). But whatever else occurs, two features might be noted.

First, the increases in actual income to the extent they are run through the banking system (and sooner than later these issuances all do), directly or mediately, will bring about an issuance of paper money to facilitate the ongoing, expanding economic activity. (This will be done by the bank of banks, the state's central bank.) This inflates the means of current payment and also provides the basis for further, future speculation.

Second, whether in the immediate productive sense as title to a certain quantum of labor-power, plant, machinery, inventories or as title to stocks, bonds, mortgages or any of the myriad, convoluted financial "instruments" as they exist today, credit detaches and renders independent the capitalist claims on capital from the total surplus-value as it is generated in production and realized in exchange. The former exceeds the latter, and as speculation develops over time this excess grows.

Speculation, or at least persistent, large-scale and ubiquitous speculation in the sense that induces monetary crises, is not simply given with the issuance of credit. Ultimately, it develops because as the rate of profit falls productive investment offers declining returns relative to what can be gained by speculation itself. This occurs in a long chain of events: Based on technical inputs into production, new machinery is introduced and set in motion by abstract labor whose productivity accordingly increases. Workers are replaced by those machines and consequently expelled from production, losing their employment. At the same time, the sheer mass of commodities grows. And, in the relation between the increasing devaluation of fixed component of capital as new technical inputs enter production and declining presence of value producing living labor in production, the average rate of profit spread across the entire economy falls. Speculative investment accordingly increases, at a certain point (i.e., as it feeds on itself) it increases dramatically.

Still the massive extend of credit, rampart speculation and the growing divergence of the surplus-value generated on the basis of production and realized in exchange to one side and the paper claims on it to the other is not directly and immediately the outcome of a falling rate of profit across the economy as a whole (emphatically not to be situated in any single group of great firms or even the aggregate of firms considered empirically). In any monetary crisis, there are as a rule other mediations (e.g., taxation policy, expenditures on war that increase a national debt creating the necessity of bond issuance), none of which are external to the dynamics of capitalist development, none of which are "exogenous 'factors'" but, all of which not only heighten and intensify speculative in lieu of productive investment, but which underpins those very dynamics, among which first and foremost is class struggle. For it is proletarian defeat in major class confrontations that allows technical innovation in capitalism to proceed with a vengeance, on the basis of which, further, working class recomposition is achieved in a really big way (leading to reduction in the absolute numbers of workers in the "advanced" sectors of industrial production), which further leads to income redistribution and, as the potential power of workers in industry decreases, growing inequality through the tax code as it is promulgated at the level of the state – the very arena in which otherwise antagonistic capitals forge their unity in a program generally expressed in legislation, enactments, decrees – which, in turn, puts more money in the hands of those most disposed to speculation.

Here we reach a critical point whose immediate outcome is either depression or monetary crisis. Historically, as the ratio of formation of speculative (fictitious) to productive capital increased, the rate of inflation increases... well it did at least until the last financial crisis and the more or less simultaneous introduction of low to zero interest rates and the flooding of the banking system with fiat money (quantitative easing)... Here the banking system or its summit, the state's central bank (the US Federal Reserve, European Central Bank, Bank of Japan, Swiss National Bank, Bank of England, Peoples Bank of China), is decisive, for if the growth of the money supply created by central banks slackens

or tapers off, a payments shortage inclusive of a credit crunch ensues. If the money supply continues to expand proportionately relative to the growth of rampant speculation, interest rates must also increase (in order to counter the inflationary discounting of long-term credit) which, in turn leads to abandonment of that form of credit, to increase in the use of short-term credit, increasing this form of debt, to increases in the rates charges for short-term debt and, in particular, to an accelerated rate of payments on this form of debt... At least historically. Following the 2008-2009 financial crisis, central banks, above the Federal Reserve, stepped in with enormous cash infusions without regard to inflationary consequences (which would only begin to appear in the event of genuine recovery which, in turn, has to date ten years down the road not occurred) and at a certain point simply suppressed rate hikes in favor of near zero interest rates... Recall that all nearly all debt of this sort is speculative, and is leveraged (i.e., a small percentage, say 5-10%, of cash actually stands behind each level of these financial "instruments," and the more the "assets" in question have been resold the closer to zero this margin approaches). While until this moment the state under the auspices of the central bank can continue to postpone a reckoning both by taking the astronomical amounts of fictitiously accumulated capital, debt, onto its balance sheet *and* by suppressing interest rates, at this moment it takes simply one margin call to send the whole house of cards tumbling down. When it happens, we have a monetary crisis: Banks are fearful of lending to each other doing so only at the most exorbitant interest rates, firms cannot borrow and payments against loans (debt service) halt, In short order a cascade of plant shutterings follow - a shutdown in production sites across the world.- and the volume of world trade begins to precipitously decline.⁴¹³ This leads to a large-scale unemployment which taken together amount to a depression. Again, witness the Lehman Brothers aftermath...

⁴¹³Similarly, Marx: „...unterbricht an hundert Stellen die Kette der Zahlungsobligationen an bestimmten Terminen, wird noch verschärft durch das damit gegebene Zusammenbrechen des gleichzeitig mit dem Kapital entwickelten Kreditsystems und führt so zu heftigen akuten Krisen, plötzlichen gewaltsamen Entwertungen und wirklicher Stockung und Sturz des Reproduktionsprocesses, und damit zu wirklicher Abnahme der Reproduktion.“ ("The chain of payment obligations due at specific dates is broken in a hundred places. The confusion is intensified by the attendant breakdown of the credit system, which develops simultaneously with capital, and leads to violent, acute crises, to sudden, forceful devaluations, to the real hold-up in and interruption of the process of reproduction, and thus to a real drop-off in reproduction.") *Das Kapital, III*, 15.3: 251.

Technological Innovation and the Expulsion of Labor from Production (Immiseration) Growth of a Global Surplus Population

There are three inseparably distinct dynamics at work here.

The first is the irreversible decline in the absolute number of workers over time in those areas of economic activity where the organic composition of capital has increased over the same time. The second is ongoing incorporation of new non-proletarian strata into the waged labor-capital relation. The third, providing the subtitle to this section, is the absolute growth of a global surplus population.

Start with the fundamental situation.

This is capital competition and the consequent technical innovation individual capitals are compelled to pursue. The development of labor's productivity which follows, the general rise in productivity, devalues existing capitals, i.e., fixed capital, other elements of constant capital (e.g., raw materials) and exchange values of commodities. That general rise, and hence the devaluation of existing capitals, is qualitatively exacerbated by the other side of the same process, the rapidly increasing productivity of labor with each new innovation in production (i.e., having been systematically integrated into production and now funded by large capitals, once science and its technology provide the wherewithal to generate those novel materials or processes in ongoing fashion. By way of increasingly sophisticated instruments of "observation" and "experiment,"⁴¹⁴ This prodigious productivity of labor which sets the technological apparatus in motion leads directly, and pretty much immediately, to the expulsion of labor in those spheres of production where the organic composition of capital is high, i.e., in the technologically most "advanced" sectors whether it has been in the railroad roundhouses, in auto (in 1931, Ford employed in excess of 101,000 workers at its River Rouge plant alone, today Ford and General Motors employ less than 80,000 workers across North America) or in digitally-based social media firms... This entire movement renders great masses of workers redundant. They are expelled from production. (And, yet, let us not forget what is presupposed here: The *historic defeats* of workers in large-scale class struggles, very often over introduction of technical innovation, which have culminated in class recomposition).

At the same time, the growing organic composition of capital, together with the pools of "hot money" (monies accruing from nearly thirty years of neoliberal lowering tax rates on capitalist firms, of printing money to cover "small" imperialist wars, e.g. the US in Iraq, Afghanistan and Iraq again, without ever generating revenues to cover these "expenditures," and banking bailouts and continuing provision of massive "liquidity" in the forms of "quantitative easing" whether conducted by the Federal Reserve, the Bank of Japan, the European Central Bank, the Bank of England, etc) finds various capitals, reacting to both subjective desire and objective compulsion, continually seeking out means to enlarge the total surplus. In what was thought to describe an historically abandoned practice best described by Rosa Luxemburg, capitals find themselves searching for opportunities where they can exploit an unequal exchange of non-equivalents.⁴¹⁵ Movements of capital of this sort incorporate, new previously non-proletarian strata into the waged labor-capital relation.

This contradictory tendency, expulsion of labor from production coupled to incorporation of new, non-capitalist forms of labor into production, is driven, we stress, by the prodigious productivity of labor itself. It is formed by another, a "terrible" contradiction between necessary labor expressed in ever smaller fractional parts of the working day and corresponding ever greater surplus labor that creates the inescapable difficulty of capital in its own self-realization.⁴¹⁶ The simultaneous tendency to expel and incorporate labor into production is manifest in the very bipolar organization of developed capitalism on the scale of the world. We are referring to the existence of contemporary capitalism at two poles, the tendentially rentier economies of the old metropolises largely in the West and the dynamic, industrially

⁴¹⁴ *The Critique of Science*, Interlude, "Real Domination, I: The Real Subsumption of Labor under Capital" and this work's Preliminary Conclusion, "Science and Capital."

⁴¹⁵ *The Accumulation of Capital*. London, 2003 (1913): 409-419, where she describes British financial capital's loans to the Egyptian Khedive against which serf labor producing cotton was exploited through sale of its product, cotton, on world markets for the exchange required to repay loan principle and usurious interest.

⁴¹⁶ „Je entwickelter also schon das Capital, je mehr Surplusarbeit es geschaffen hat, um so furchtbarer muß es die Productivkraft entwickeln, um sich nur in geringem Verhältniß zu verwerthen, d. h. Mehrwert zuzufügen - weil seine Schranke immer bleibt das Verhältniß zwischen dem Bruchtheil des Tages der die nothwendige Arbeit ausdrückt und dem ganzen Arbeitstag. Innerhalb dieser Grenzen kann es sich allein bewegen. Je kleiner schon der Bruchtheil, der auf die nothwendige Arbeit fällt, je grösser die Surplus-arbeit, desto weniger kann irgend eine Vermehrung der Productivkraft die nothwendige Arbeit sensibly vermindern; da der Nenner enorm gewachsen ist. Die Selbstverwertung des Capitals wird schwieriger im Maße wie es schon verwertet ist.“ ("Thus the more developed capital already is, the more surplus labor it has created, the more terribly must it develop productive power in order to realize itself in only smaller proportion, i.e. to add surplus value - because its barrier always remains the relation between the fraction of the day which expresses *necessary labor*, and the entire working day. It can move solely within these boundaries. The smaller the fraction already falling to necessary labor, the greater the *surplus labor*, the less can any increase in productive power sensibly diminish necessary labor since the denominator has grown enormously. The self-realization of capital becomes more difficult to the degree it has already been realized.") *MEGA II/1 Ökonomische Manuskripte, 1857/58 (Grundrisse der Kritik der politischen Ökonomie)*. Teil 1: 254-255.

productive economies of East (and South) Asia, distinctions which (together with the capitalist periphery) are articulation of "moments" within a highly integrated world system of social relations.

Now the expulsion of labor (which goes by the name of de-industrialization in societies of the old capitalist metropolises) is not merely a function of the decline of those tendentially rentier economies, just as the incorporation of new, previously non-capitalist forms of labor into capitalist production, proletarianization, is not merely a function of the growth and ascendancy of the dynamic, industrial economies. In the United States, for example, the auto giants, General Motors and Ford, have "shed" some 80,000 production jobs in the last eighteen months (circa May 2010); yet, the presence within that overall economy of Spanish speaking labor recruited largely from the villages of Central America (Mexico, Guatemala and El Salvador) continues to grow. In China, the truly massive influx of peasant labor from the countryside into the coast cities of East Asia, reputed to be the largely such migration in the history of capitalism (or, for that matter, in the history of humanity), occurs alongside the loss over the last decade of more than twenty million jobs in the State sector, largely in heavy industry. Thus, the expulsion and incorporation of labor within the system of capitalist relations at the level of the world goes on within both the older, tendentially rentier economies and the newer, dynamic industrial economies of this system.

What, then, is theoretically captured and fixed in the tendency toward the simultaneous expulsion and incorporation of labor is the migration of labor, internal migration within the national borders of states and (our concern here) migration across those boundaries. This migration is largely from the periphery to those regions where capitalist development is most rapid (where capital expenditures are concentrated), regardless of whether those regions are to found in "old" or "new" economies, or, for that matter, in oil rich regions of the Middle East

So if this increase in the productivity of abstract labor, the declining quantities of socially necessary labor time, required in the production of commodities as they are averaged across whole industries, has, tendentially, a precise "corollary" in the expulsion of labor from the global production processes of capitalism, over historical time expulsion has become exponential. Consequences entail permanent and massive unemployment and underemployment (not to mention relentless reductions in the wage), casualization on a global scale, an enormous "informal sector" worldwide all of which flows off into an amorphous social mass, an unemployable global surplus population. And this is the point: This development has gone so far that it no longer makes sense to speak of an industrial reserve army, but rather a global surplus population. This vast population,⁴¹⁷ often laboring in the informal economies of the world, suffer from the worst human afflictions (malnutrition; infectious diseases such cholera, tuberculosis, and AIDS; and a spectrum of chronic and social diseases, diabetes, cancers, heart disease, and dysentery, colitis, enteritis, typhoid, paratyphoid fevers, etc.) and, as it were by definition, lack the monetary wherewithal to treat these afflictions, diseases and disorders. (Ironically and sadly, these are only a few of the disorders and diseases that medical industrial production was ostensibly formed to deal with.) Deep into the epoch of capital's real domination, the logic and movement of capital demand and produces swelling global surplus population as a necessary, structural condition of the reproduction of the system of social relations.

We are inclined to agree with Marx, a further ramification, over historical time, of this situation is general impoverishment and increasing immiseration.⁴¹⁸

Against the headwinds of a high organic composition of capital in the most technologically "advanced" sectors of the global capital economy, unrestrained financial speculation and the central banks' fiat money "liquidification" practices to support it, period revolts by a growing masses of the world's surplus populations in the face of deteriorating living standards, impoverishment and, or, immiseration, ruling classes everywhere find it increasingly difficult to unblock the impasse the prevents renewal of sustain capital accumulation over an entire period. Taken together with increasingly fierce interimperialist rivalries characterized by belligerent nationalisms and more and more restrictive protectionist policies, the reified system of social relations otherwise known as the global economy appears to becoming, again, more and more unstable, and likely to issue in increasingly periodic crises, financial ones that reach back into production with consequent plant shutterings at sites around the world and precipitous falloffs in the volume of global trade.

⁴¹⁷Taken together with the casualized, vastly underemployed (relative to the requirements of socially reproducing themselves), the unemployed and those who have never experienced work in the first place, this global surplus population may be in excess of two billion human beings.

⁴¹⁸*Das Kapital*, I, 23.2.

General, Systemic Crisis of Accumulation

Citing a mass of statistical evidence, it has been suggested that US economy has never adequately recovered from a falling rate of profit that reached its nadir in the late 1970s and early 1980s.⁴¹⁹ It is certainly a position with which we agree, and one, moreover, which concurs with the underlying systemic motive for the shift from productive investment to speculative finance in the US, Europe and Japan (with the partial exceptions of Germany and Japan) beginning in the middle 1980s.

That shift reorganized the world economy: In East Asia, an industrial arc beginning in Seoul and running south and southwest to Bangalore formed as the old metropolitan centers of capitalism increasing became rentier. This reorganization permitted a novel center of capital accumulation to emerge, one situated along a line from Shanghai in the north to Shenzhen in the south, one distinct from the once dominant center running from Boston to New York, and one now fiercely competing with the other, each embodying distinctively different principles of capitalist social organization, each the core of antagonistic national powers - centers of global interimperialist rivalries. Rivalries notwithstanding, each pole (industrial and rentier) of capitalist development is contradictorily yet deeply intertwined with the other through trade, global supply chains and direct foreign investment. Disengaging, "decoupling," the two global hegemonies will be extremely difficult, not to mention excruciatingly painful for the underlying popular masses of both societies, and will accelerate the drift toward renewed imperialist world war.⁴²⁰

The great capitalist powers are locked into their respective trajectories, the United States for instance will remain rentier, with its industrial base largely confined to defense production and small shops engaged in production for export. It is not going to reinvent itself as a gargantuan industrial powerhouse. The underlying causation of the shift to speculative finance has not been overcome, and its consequences, a fiat currency, financialization and massive debt will continue to plague and degrade economic performance in the whole of the old metropolitan capitalist world.

Should an emerging youthful proletariat in these older centers, especially in the United States, fail to form a new historical working class core capable of and compelled to mount a sustained challenge to capital, tendentially the direction of capitalist development in the older metropolitan centers will confront a slowly unfolding downward spiral, a series of slumps (rapidly accelerated by the outbreak of global pandemic, the first beginning in late autumn 2019 has already appeared, together with an ongoing and accelerating abruptly changing global climate and all the destruction by way of torrential downpours and flooding, wildfires and drought, cyclonic storms, and raising sea levels, of human landscapes it creates), perhaps culminating in a very deep global depression, but more likely a renewal of imperialist world war.

To facilitate understanding just why, absent a forceful proletarian challenge, these appear as the historically inevitable alternatives, it is necessary to briefly review the logic of capital which is overpowering at work in this development:

Because each and every capitalist seeks to drive down production costs and, to do so, brings new machinery to production, the amount of socially necessary labor time embodied in each commodity changes: Over time, it declines (as the mass of commodities produced increases). Because this decline also confronts each and every capitalist as an objective necessity, an event of a total societal production process utterly beyond her control yet a product of each and every capitalist's efforts to reduce production and specifically labor costs, each capitalist is compelled to produce more to compensate for declining prices. This objective necessity is the logic of capital...

Now is precisely this compelling necessity, this logic, which creates capitalism as a system, as an interconnected, interlocking production-based network of behaviors, practices, processes and institutions that incessantly undergoes change and development (expansion and quantitative enlargement) - this change and development of capital (it is cyclical) we call its movement.

The all-around increase in production, and the intense competition it leads to, forces capitals to seek competitive advantage in technical innovation (new machine inputs) in production (and elsewhere, in the various spheres of circulation and exchange). Technical innovation as inputs to production, where production too is understood as a global phenomenon, further lead to a situation in which the productivity of labor markedly increases. (The same competition in circulation, or as large financial capitals mediate exchange, compels those capitals to generate ever more complex, risky "instruments" to leverage debt, creating ever-growing "moral hazard," debt pyramiding and irredeemable claims (titles) on underlying "hard" assets, i.e., fictitious accumulation.) Growing technical inputs and increasing labor productivity, simultaneously expelling more living labor from production and raising the organic composition of capital, countervailing tendencies notwithstanding, lead to a *falling rate of profit*. The latter, in turn, leads to further financialization, pushes capitalists to produce more, leading among other things to overproduction (not all commodities available for purchase can find buyers) just as a global, average rate of profit falls further and further, all these - financialization, debt pyramiding and a growing mass of irredeemable titles to underlying assets, overproduction and underconsumption, and the mass of superfluous labor-power - are more or less simultaneous events or occurrences (not however historical causation), and while the product of the insufficient production of

⁴¹⁹Andrew Kliman, *The Failure of Capitalist Production: Underlying Causes of the Great Recession*. London, 2011: 6, 48-73.

⁴²⁰See the final section of this work bearing this phrase as its title.

surplus value making it impossible for capitalists to valorize adequate amounts of abstract labor to sustain production at existing levels of development of productive forces, as the rate of profit falls the specific causation of crisis lies in the contraction of the mass of profits below the level of the costs of renewing production, i.e., investments in labor-power (variable capital) and plant, equipment or machinery and its maintenance, raw materials, auxiliary substances (constant capital). Utterly lacking the wherewithal, capitalists now stop investing.⁴²¹ A simply enormous devalorization has become necessary to overcome the impasse confronting capital accumulation, to restart it. But at this point even shuttered plants, bankruptcies and massive job losses will not restore profitability to a level where it can be sustained beyond a short-term upturn. An enormous debt overhang still remains, and all of those fictitiously accumulated titles to underlying assets must be destroyed before long-term profitability can be restored.

Historically, two forms of crisis resolution stand out: First, there is the characteristic and ubiquitous underutilization of productive capacity during a depression which results in massive deflation, a collapse of existing prices which effectively devalues vast amounts of existing capital. Second, there is war which produces a tremendous destruction of capital in its sensibly embodied forms (human life as potential capacity for labor, buildings, machinery, raw materials, and commodities). On the face of it, these forms of crisis resolution appear relative to the destruction of goods embodying value. In either case, however, insofar as a general devalorization results in the collapse of stock and bond prices a devalorization of fictitious capital does also largely occur, but then neither form of devalorizing crisis resolution has ever unfolded in the era of fiat money in which speculative finance has run rampant. If today a general devalorization starts from a financial crisis (while causally originating in the mass of profits shrinking below the level necessary to renew production), before (or as) the destruction of constant capital and the devalorization of labor-power occur something on the order of a hyperinflation must also occur to realign fictitious titles to devalorized underlying assets. The role, function and power of financial capitals in the contemporary balance and relation of class forces severely restricts realization of this possibility.

This brings us back to our point of departure, the tendential direction of capitalist development. In the absence of a proletarian challenge to the order of capital, we think continuing drift toward, then outbreak of, renewed imperialist world war is far more likely than a massive devalorization (entailing a specific financial event destroying fictitious titles) by way of a grand slump or series of slumps.⁴²²

First, the polarization of global capitalism has lent itself to the formation of a competing (industrial) power, China, with aspirations to global hegemony, thus challenging the dominance of the United States. This competition today has issued in a trade war the outcome of which is far from decided or finished (it will deepen) while degrading the productive capacities not only of the immediate contenders but all great power capitalist states. It has, quite patently, exacerbated interimperialist tensions and heightened rivalries. The effects here cannot be underrated. As we, arguing from historical evidence, point out in the final section, the incorporation of the state into the circuits of capital, and with it the formation of states acting as national capitals, has entirely transformed the nature of interimperialist rivalry: Geo-political and ideological moments of ruling class awareness have become constitutive elements in the construction of the imperialist order itself, and in the case of renewal of world war these moments constitute an enormous compulsion intertwined and inseparably distinct from "purely" economic motives in determining the courses of actions states pursue in the international arena.

Second, depressions no longer devalorize adequate capital to restore accumulation. It is not just the mounting problems that accrue as residue effects of the inadequate devalorizations of the whole period, 1978-1996 (renewed again in the early 2000s), it is the very fact that the devalorization of this period was inadequate. More significant, at far lower levels of fixed capital (plant, machinery and other equipment), as well as the plant and machinery housing auxiliary substances such as chemical and cement factories, the devalorization in Germany and the United States, the epicenters of the Great Depression, was inadequate to restore sustained accumulation.⁴²³ In 1938, we recall, the

⁴²¹Ironically, we might say they go on strike.

⁴²²We see a (series of) slump(s) as necessary, just not adequate.

⁴²³For Germany, Martin Broszat, *Der Aufstieg der NSDAP und die Zerstörung der Weimerer Republik* (München, 1984) and Eve Rosenhaft, *Beating the Fascists? The German Communists and Political Violence 1929-1933* (Cambridge, 1983). Though neither grasp the centrality of the restoration of accumulation for the onset and resolution of the grand crisis, analysis of the desperate situation on the ground can be taken as an oblique indicator of such. In this respect, chapters 1 and 2 in Broszat and chapters 5 and 6 in Rosenhaft are of particular import.

Sources with a view to the United States are legion, but again examining the impasse in accumulation through the prism of the dire circumstances of ordinary people, we'll instead relate a short story:

My father's father was a carpenter living with his family on a ten-acre farm (in the southeastern corner of Oklahoma) that hadn't been plowed in a generation. He couldn't get work. There, in 1932-1933, men were paid \$.25 a day... My father was a crack shot with a .22 rifle. Close-up with a shotgun, he couldn't miss. (Who could?) On a cold, dry day in late November 1933, four Canadian geese landed in what was once an old cornfield about a quarter mile away from the farmhouse. My father's father had a twelve gauge double-barrelled shotgun, and two shells provided by a friend whose family owned a neighboring farm. All of ten years old, my father took the loaded shotgun and crawled that quarter mile down an old drainage ditch that ran just affront the low ridge where the geese had landed. When he got with twenty-five yards, he stood... too abruptly. He spooked the geese, they spread their wings and began to take to the air. The lead gander was the biggest goose my father had ever seen, possessing a wingspan of perhaps seven feet. He

economic growth precipitously declined and the US underwent a return to depressionary conditions.⁴²⁴ It was the extraordinarily spending, as it now almost without exception acknowledged, on plant and equipment designed for military use, its finished products designed for destruction thus entailing constant production, which lifted these countries out of depression; and it was the inordinate, nay prodigious destruction visited on industrial landscapes (including neighborhoods domiciling working class families), excepting the United States, which accomplished the necessary devalorization.

Third, all important social groups and institutions central to reproduction of the entire system of social relations (ruling class factions ensconced in the state, proletarian groups in production, central banks) militate against devalorization. Which does not mean a devalorization won't occur, just that policies are designed to prevent it from occurring; which, in turn, means when it recurs, devalorization will not be far-reaching enough - firms that would otherwise go belly up and capitals that would otherwise disappear won't, centralization of capitals won't be otherwise as extensive - to restore accumulation at a pace and tempo that would renew long-term expanded reproduction. In this respect, we are in general agreement with the contemporary left communist thesis to the effect that once real domination became epochally ascendant in the global sense (which we identify with the real domination of capital over society),⁴²⁵ an "event" we date to circa 1950, the business-based shakeouts, devalorizations, which characterized, for instance, the agricultural depressions late in the long nineteenth century would no longer destroy or devalue enough capital to ensure a restoration of accumulation.⁴²⁶ The reason for this has to do with the qualitative, qualitative mind you not increment and quantitative, differences between two regimes of accumulation, that in which absolute surplus-value dominates and that in which its relative form is supreme, thus, with the qualitative and quantitative increase in fixed capital in production that characterizes the latter.

So, a fourth reason why a massive devalorization of capital in its classically depressionary form is inadequate to restoration of accumulation with requisite profitability to sustain a long expansion can be given as follows: Deep into the era of real domination, the turnover times of capital have become so reduced (in transportation as well as in production) and the productivity of labor so prodigious, the devalorization based on business shakeout will neither destroy nor centralize enough capital to sustain a renewal of accumulation. It is a question of the relation between turnover times, machine design and profitability:

In very recent times, the issue of turnover time can be seen in transportation, for instance in Amazon. Beginning with a single East Coast (NY) warehouse shipping out books whose delivery times ranged from two days regionally to six days on the other coast, Amazon has built distribution centers across the United States and in England and Europe. The firm no longer need rely on very pricey second- and first-day air to delivery any one (or any number) of tens of thousands of different line items, but within a metropolitan region can not only deliver the same day, but by deploying drones can complete delivery within two hours from the placement of an order. This may be an extreme example (it may not), but the reduction in transportation times (and costs) and thus in turnover times illustrate and exemplify the transformations in transportation. Here, with a view to transportation costs we shall not even elaborate on oceangoing container shipments. In production, the case of galvanized steel is an example we have often cited. Since 1890s, three novel forms of furnace (open hearth, integrated oxygen and electrical power-based minimill) have appeared. Just before 1900, it took 14 man hours to produce that ton of galvanized sheet steel; today, efficient minimills can form it in 45 minutes. We need not look to production of means of production or so-called consumer durables such as automobiles (where one might cite the difference in output as measured in man hours between the custom, hand manufacture of an automobile circa 1895 in Paris, where production took months, and the robotic manufacturer in Munich, Dearborn or Moka-machi today, where production can be measured in hours); instead, we need only survey the numerous secondary forms of distribution of manufactured goods in contemporary metropolises. In the United States, any number of outlet stores, consignment shops, wholesalers doing retail business selling clothing and other apparel, kitchen wares, furnishing for apartments and homes, and so on, suggesting a global productive capacity so vast that overcapacity is rarely if never problematic; or, alternatively, walk through a number of "dollar store" type operations that sell the productive overage, the trinkets, babbles, swizzle and junk, that brand name retailers can't unload.

The point is thus: The turnover times of capital are so rapid and the productivity of labor so stupendous that any large-scale devalorization of the classical type simply cannot devalue enough capital to sustain, once accumulation resumes, longer-term expansion, because at whatever amounts of capital (in the forms of plant, equipment, raw

was stunned by the size, and, in his hesitation got off just one shot bringing down one of the geese. He returned to the farmhouse with the single goose, the shotgun and an unused shell. The single goose was given over to the neighboring family. (The agreement was for each family to have a goose.) My father was belt whipped on his rear by his father: It was a hard lesson, but life was lived too close to the edge, the opportunities far too rare to permit the memory of such a failure, no matter the reason, to be forgotten...

⁴²⁴See the discussion in the next section, "Class Struggle and the Drift toward Renewed Imperialist World War," at fn. 429, below.

⁴²⁵See the concluding remarks to the Prologue, "Real Domination at its Origins as as an Epoch in the History of Capitalism," above.

⁴²⁶There were three, 1873-1876, 1882-1884, "Real Domination at its Origins as as an Epoch in the History of Capitalism," above.

These depressions belong to the twilight era of formal domination in the epochal sense, one in which absolute surplus-value still, globally speaking, was the predominant method of extracting extra value from workers in production.

material inputs, etc.) that remain operative following said devalorization renewed profitability will be compelled, yet unable, to start from those turnover times, those immediately preceding devalorization, to which existing (remaining) plant, equipment, etc. were most efficiently designed for and at which they functioned profitably.

This leaves war. Not just, however, any kind of war (which at best "merely" destroys capital valuations in a single country, or a region), but renewal of imperialist world war. If it breaks out (whatever immediate event precipitates it), such war would be nuclear; it might begin that way (with a first strike) or it might escalate to that point. With a view to devalorization, this is irrelevant. It would likely also be chemical and biological (deadly pathogenic). The problem here would not just be too much devalorization, but if not a humanly uninhabitable Earth then (minimally) destruction of the productive forces of global capitalism below a level at which they existed at the end of the Merovingian era (circa 750-800 ce) in the West. With all its attendant poisoning of soil, water and air, capital production in any form could, in our view, *not* be restarted.⁴²⁷ This line of reasoning does not, none of this unfortunately, impinges on the logic of capital.

⁴²⁷If something like a state in any institutional sense survived a nuclear war (and here we mean something beyond its rudimentary form of a leader and a body of armed men), it would be on the order of autarky-based, universal totalitarian polity engaged in the singular effort of creating sustainable agricultural production (not likely) based on forced, effectively slave and not waged, labor.

Class Struggle and the Drift toward Renewed Imperialist World War

Following Marx, we started with an analysis of the commodity. And, with Marx, mediated by the whole history of capitalist development as it increasingly has encompassed the entire world, we close with social classes and their struggle.

Against the double backdrop of new technological inputs into industry and the appearance of capitals of historically unprecedented size and a series of agriculturally based, deflationary crises that characterized the era of transition from formal to real domination *at its outset* (1870-1914), modern imperialism emerged in the latter nineteenth century as national ruling classes, including some new social groups within specific ruling classes based on capitalist finance, began to *feel pressure emanating from proletarian groups, or worker-peasant (or farmer) axes, that challenged the hegemony of capital at the level of power*. To be sure, these pressures neatly dovetailed with specifically economic phenomena, seemingly products purely of the movement of capital, overproduction of agricultural commodities (wheat, cotton, rye), finished manufactured goods that could not be absorbed in the home market, a surfeit of idle capital.

In this sense, imperialist activity first appeared as a response to the inner dynamics of capital's movement, initially, at the national level, that is, as a response to development based upon cyclical movement of contraction and expansion, to a general rise in *abstract* labor's productivity (expressed in the tendency of the rate of profit to fall), to concentration and centralization and to overproduction. While competition between capitals leads inexorably, both logically and historically, to concentration and centralization of production and the means of production, to increasing technological inputs to the labor processes, and to, accordingly, enormous productivity increases and thereby to the real possibility of overproduction and asset deflation, spurred on by the crushing brutality of absolute surplus-value extraction it was the *growing militancy, organization and consciousness of workers that finally pushed capitalists, hegemonizing the state at the national level, to attempt to resolve the contradictions in the domestic economy at the level of the world*.

Modern imperialism, then, a historically evolving phenomenon, appeared at a certain level of capitalist development and organized the activity of capitals on a world-scale. Then and now, it is organized largely through national states: As imperialist activity has unfolded, it has led to the practices of ruling classes that defend their most important capitalist firms and national industries in the global arena. These practices are borne by states, the unity of diverse, otherwise competing capitals arduously elaborated and forged within institutional framework of polities. From the perspective of these *inter-imperialist rivalries* in the process of formation, these practices taken together amount to the construction of, to defend, "national" capitals, i.e., those core capitals which each state, that is, the dominant ruling class social groups that act through them (that man them, that formulate their policies), deems necessary to the existence and expanded reproduction of the order of capital. At the level of the world, states stand in for, represent as it were, national capitals. In so doing, they utilize whatever means, economic, diplomatic and military being the most frequently resorted to, to defend and augment themselves, i.e., their core capitals...

The *first imperialist world war* had its roots in the struggle over colonial territory, over raw materials (resources) appropriation and sources of cheap labor, over these territories as outlets for commodities whose value was unrealizable in the domestic markets and as sites of capital export all of which were achieved through direct colonial administration or international loans.

The struggle dated to the seventies of the nineteenth century, and it can be seen in Egypt where the French lost out to the British, in the African Great Lakes region where same great powers competed (e.g., Rwanda), or in central and southwest Africa where the Belgians and Germans were locked in fierce rivalry, in the Philippines (during the eighties) where the US and Germany were at loggerheads, again in coastal east China where all the great powers particularly the British, French, Germans and Americans strove for control, and where Russian and Japan fought a war (1904) for dominance of Port Arthur and over the Liaotung Peninsula.

It was these fierce interimperialist rivalries that created the military alliances that were forced into play, became actual, with the murder of Archduke Ferdinand...

The *Slump* was the concentrated expression of the lengthy, *general crisis* of capitalism (whose beginning was marked by the outbreak of the first imperialist world war and whose end was demarcated by conclusion of the second). In the history of capitalism those two imperialist world wars, taken together with the Great Slump, defined the epoch of the general crisis of this system of social relations and characterized the transition from the era of formal to real domination globally.

The Great War, that is the first imperialist world war, failed to resolve problems, aporia and contradictions the reached back to the nineteenth century: Three depressions (1873-1876, 1884-1886, 1892-1896) had left unresolved the systemic problems of capital surfeit and overproduction. Those depressions did nothing to devalorize the productive capacity of the competing powers, the United States, Canada, Argentina, Germany and Russia, amongst the largest agricultural producers.

Exacerbated by the tensions, hysteria and xenophobia unleashed by war (themselves deepened by the Versailles

Peace), by 1925, these problems began to reemerge more and more as a crisis of agricultural overproduction (wheat) forcibly appeared. Beginning with the imposition of quotas on imports increasingly more restrictive, and more protectionist, measures were brought to bear, were utilized, to combat the various manifestations of the crisis as it unfolded. The contraction in agriculture spilled over sometime in late spring – early summer 1929 into industry, yet it was only the stock market crash in autumn 1929 that made the crisis both an object of public, national concern (Germany, United States) and that generalized its effects to almost all social groups and classes, the former following from the latter.

With the US stock market crash, the crisis became a deflationary contraction of existing values, especially values embodied in industrial equipment, plant, inventories and firms, a crisis with its own specific problems and logic, absorbing, changing and exacerbating the problems of declining agricultural production; that, with an enormous contraction in capital assets sharpening and deepening a mild contraction in industrial production (generating cuts in output and large layoffs), which, greatly exacerbated by reflex responses – protectionist measures beginning with tariffs devolving into foreign exchange controls and blocked accounts, currency devaluations, bilateral trade and regional trade agreements – that essentially brought a halt to world trade, after spring 1931 with the collapse of the Austrian *Kreditanstalt*, became a financial crisis as well, that, in turn, once again reverberated through the entire reified system of social relations, increasing stresses on it and multiplying those points at which a state might crack (within the framework of global capitalism, insolvency, seizure of power by a social movement of the right committed to autarky and war). Thus, on the heels of this collapse of inter-capitalist normality, trade wars led to shooting wars: The entire contraction and involution of inter-capitalist exchange and trade highlighted and aggravated domestically developmental tendencies that reached back to the origins of states as capitalist powers. They aggressively pursued extra-economic policies based upon a decided inability to resolve internal class conflict, on autarkic creation of hinterlands for production of raw material and foodstuffs and on similar regional domination up to and including outright conquest and genocide to secure, seizing and expropriating, raw materials sources,⁴²⁸ bringing them into direct and open conflict, in a word, renewing imperialist world war...

The *second imperialist world war* was grounded in the foregoing situation. For not only did the Slump and responses to it deepen interimperialist conflict over trade (trade wars) and its terms, starting from the *catastrophic failure of working class movements* to crush rising fascism, the autarkic solutions (Germany above all, Japan) effectively constituted aborted shooting wars (oft aborted because the overwhelming superiority of these great powers made open resistance impossible), but those very responses obliquely demonstrated the Slump had not ended.⁴²⁹ It was massive military expenditures in preparation for war, with it the Keynesian commitment to deficit spending and *destruction of worker vanguards* (Germany) or *union mediated subordination of worker struggles* to a “democratic” party of capital (the US, Britain, France), that lifted the great imperialist power economies out of depression.

Once capital's reflex response to the general crisis, the Slump, compelled state “intervention” in the economy (asserting control over the money supply, separating deposit from investment banking, currency devaluation, setting floors on agricultural prices with financial support and extending credit to farmers, etc., to avoid grain overproduction, etc.) and, beyond this, its, *the state's, incorporation into the circuits of capital* as a product of that very movement, *new imperatives, those of states as national capitals, asserted themselves, which have involved elements of ruling classes' historically constituted social interests and ideology*, especially rabid nationalism, revanchism and irredentism.⁴³⁰ This new shape (incorporation of the state into capital's circuits) directly impinged on the manner in

⁴²⁸Thus, in September 1931, militarists within the Japanese Kwantung Army militarily occupied Manchuria. During the ensuing occupation, Japanese capital poured in and industrialization in Manchuria marched in lockstep with that in the Korean north. Then, in July 1937, the Japanese army launched at full-scale invasion of China. Fighting developed between the Japanese army and both the Chinese Communist party led by Mao and Chiang Kei-shek's nationalist forces grouped around his Kuomintang.

⁴²⁹Wages increases won during the struggles of 1935, taken together with the shake-out (bankruptcies, bank closures, etc., and the consequent devaluation of capital stock), translated into a significant uptick in effective demand. A bottom had been reached in summer-fall 1932 in Britain and Germany, and in early 1933 in the United States. Here, indices of production, prices and employment increased rapidly from March to July 1934, but fell back and then off as recovery such as it was, was based on a build up of inventories and not new capital investment. A sustained upturn was underway by winter 1935-1936, and by late 1936 and early 1937 the depression appeared to have come to an end in all the developed areas of the capitalist world, in the United States, England and Germany. By the first quarter of 1937, industrial production had achieved and surpassed the levels of 1929 everywhere except in France (where a marked expansion had nonetheless occurred in the same three month period).

Yet industrial activity slowed in summer 1937, and in the fall it took a noose dive: In the US steel, at 85% of capacity in August had fallen to 38% in November. By December it was only a quarter of capacity (26%). Unemployment rose sharply. By winter 1938, the Slump had returned (Basil Rauch, *The History of the New Deal, 1933-1938*. New York, 1975 (1944); Charles Kindleberger, *The World in Depression, 1929-1939*. Berkeley, 1986).

⁴³⁰Incorporation into the circuits of capital as a product of that very movement it is not infusion of an element of consciousness (insight into the structure of the totality) that entered into and became a moment of those circuits (and this, notwithstanding the “fact” that within the state discussion and deliberation began to mediate this incorporation).

It is only as the state, already functioning as a national capital, engaged in formulation of *industrial policy* that the ruling class awareness in the form of planning began to exert influence on the movement of capital. We say “exert influence on” and not “shape” capital's movement. The whole process in which this incorporation developed presupposes as its basis *competition among capitals*

which those inter-imperialist rivalries developed and continue to develop: Inter-imperialist rivalry, conflict and ultimately war among states functioning as national capitals no longer had even the appearance (as for the entire period culminating in the first imperialist war and its twenties aftermath) of a simple, immediate and necessary consequence of economic-productive contradictions among competing national capitals, states, as in the first imperialist world war. This meant that *national rivalry with its necessarily accompanying geopolitical and ideological moments became an element in the construction of the imperialist order itself*. Together with the struggle for markets and resources that characterizes national rivalries, geopolitical and ideological considerations now began to bear *directly and immediately* on the course of imperialist activity as it unfolds to this day at the level of the world...

This was not immediately apparent at the outset of war itself... The US, for instance, supported Chinese Nationalists in order to wear down Japanese armed forces, first, to prevent movement south into Indochina and the Dutch East Indies (Indonesia) from where vital raw materials (particularly oil and rubber) necessary to the economy of the British imperialists and to the latter's war effort against Nazi-organized German imperialism, were extracted; second, to prevent, alternatively, movement north against the Far East Asian rear of the Soviets also engaged against the *Wehrmacht*; third, to protect substantial American imperialist interests in southeast Asian raw materials (rubber and tin, tungsten, chromium, manganese, quinine, etc.); and, fourth, to buy time in order to militarily re-arm in the likely event of a two theater war... but was apparent, nay manifest, by the war's end... Thus, Truman ordered the atomic weapons destruction of two Japanese cities not to terrify the Japanese and compel surrender, but as a demonstration and warning to the Soviets...

As the system of new relations was consolidated after the second imperialist world war on the basis of US victory, the locus of imperialist activity shifted (from capital export and appropriation of raw materials through direct colonial administration to capital export and raw materials appropriation through loans and currency exchange). It took shape as an imperialism of circulation, one resting on the creation of international financial institutions (IMF, World Bank), through which surpluses, after 1970 *more and more circulating internationally* (today along global supply chains), accrued to the leading power (the United States) on the basis of dollar transfers where the dollar backed by gold at a fixed price functioned as the world reserve currency, and, thus, through which the US hegemon was able to dominate the lesser imperialist powers, as well as the smaller capitalist nations that can only aspire to such status... US power did not, however, merely rest on a dollar suzerainty: The United States emerged from the last imperialist world war with the highest levels of *abstract* labor productivity anywhere in the world, productivity based on the world's most advanced labor processes, on the generalization of continuous flow production throughout American industry...

The aftermath of the last imperialist world war rivalry was renewed but based upon distinctively different, private and statist capitalisms and their respective blocs in tow. That rivalry compelled the US hegemon to rebuild the war-devastated economies of once great power competitors, Germany and Japan, as a condition of expanded US markets, and as the centerpiece of a geopolitical strategy (creating that bloc) of encirclement aimed ultimately at dismemberment of the state capitalist system of social relations).

A nuclear confrontation was avoided by both sides, but this merely enhanced the likelihood and actually of proxy wars as well as counterrevolutionary fights in the capitalist periphery where opposition to the old style colonialism was greatest. Some of these wars were small-scale, others, like that in Vietnam, were not.

The costs of production of massive amounts of weaponry and armaments in this war were exported abroad as the ruling class faction housed in the state refused to raise taxes to shore up its support as fighting became increasingly unpopular. Dollars piled up, especially in Europe and Japan. The situation was extremely inflationary, and European states in particular sought to exchange accumulated dollars for gold. The run on US gold reserves led Richard Nixon in August 1971 to refuse to honor the exchange as the "gold window" was closed. Currencies floated, and pricing was simply an issue of relations of one currency to all others. This permitted central banks of the reconstructed economies of the private capitalist world, but above all the US Federal Reserve, to print money without restrictions...

But fiat currencies were not simply given or, more adequately, they were embedded in the productive relations between the significant classes in society and they rested on the achieved level of capitalist development, and the resulting prodigious productivity of abstract labor.

Of most import in the United States, those relations resulted in a shift in the site of industrial manufacturer driven, first, by *institutionalized class struggle* and led to relocation to the open shop south and southwest of the continental US (to avoid union restrictions on worker exploitation), and then, second, abroad (by *open class struggle*)⁴³¹ which, unable to control, terrified the bosses) to East Asia where labor was qualitatively cheaper, unions did not exist and

that the state at *the level of the polity* is compelled to attempt to overcome. Capitalism remains "anarchistic," and that is its limit. That movement in its entirety is and will never be *consciously directed*. It can only be submitted to or transcended. Nationalism, revanchism, etc., are at best element of a *false* consciousness.

⁴³¹We refer to the wildcats (a struggle *against work*) especially in the decisive sector, in autos; thus, in Detroit, at Dodge Main in 1968, at Chrysler Sterling in 1969 and Dodge's Eldon plant in 1969-1970, at the GM Vega in Lordstown, Ohio in 1972 that led to a three week strike initially far beyond union control, and then all over again in Detroit at Jefferson Assembly, Chrysler Forge and Mack stamping in summer 1973. Let we forget other sectors, there was the nationwide by postal workers in the US in 1970, and nearly boiling over for three years and the exploding in the 1978 coal miners strike in West Virginia (Virginia, Kentucky and Ohio).

environmental restrictions did not either. By no later than 1985 US industry exhibited signs of massive decline; by the moment of the financial collapse (September 2008) that industry had effectively disappeared.⁴³² Now not all US industry relocated abroad; yet at this historical moment, 3-4 million jobs and the industries in the US (with similar numbers relative to populations in industrialized Europe, South Korea and Japan) that supported them are simply gone forever. These losses are the result of defeats in those struggles in production over the introduction, tempos and pace of novel scientific inputs (technical innovation, itself a consequence of capitalist competition), which have enormously increased abstract labor's productivity and made much of that labor redundant. For instance, just two internationally operating firms, Caterpillar and Komatsu, manufacture and provide the vast majority of earth moving machinery for construction projects in the world today, while similarly Siemens and General Electric provide nearly all the turbines utilized across the globe in generating hydroelectric power from dams. Following upon victories in major class confrontations, all four firms have dismantled their big factories, all engage in far more extensive international operations, generate considerably greater volume and operate with vastly smaller workforces than in the recent past. Pick up any manufactured item in any retail outlet in the United States today and it will say "made in China," and will any similar item in, say, Venice (or Genoa or Rome), Italy, in Rio (or Sao Paulo or Recife), Brazil, in Sidney (or Melbourne or Perth), Australia, or in Port Elizabeth (Cape Town or Durban), South Africa. This is characteristic of the entire situation of global capitalism. So that in these terms, the Chinese proletariat, perhaps just the part of it employed in Guangdong Province, alone is productive enough to satisfy the use-value requirements of the entire world.

The absolute, vast decline in the number of industrial proletarians necessarily conjoined to the extraordinarily productivity of abstract labor has created a profound dilemma for capital: Capitalism unfolds and develops through a cyclical process of rapid growth and retrenchment, expansion and contraction, boom and bust. In the systemic sense, contraction, then, crisis, the latter *driven by a falling rate of profit, phenomenally overproduction, overcapacity and commodity surfeit, a product of the insufficient production of surplus-value, mediated by class struggle the outcome of the technological innovation created by capitalist competition that renders too much labor-power superfluous, makes it impossible for capitalists to valorize adequate amounts of abstract labor to sustain production at existing levels of development of productive forces. It is this fundamental contradiction riveting the global system of social relations. In prosaic terms, it is the fundamental situation that has rendered industrial investment so exceedingly unprofitable relative to speculative finance.* And it is for this same reason that today the extended reproduction of capital and its accumulation has a decidedly fictitious component. A world awash in easy money or credit (a world where printing presses never stop even if money is not being loaned), "liquidity," has become, at least in this phase of capitalist development, a necessary condition of the reproduction of the world system of social relations (i.e., to insure the continual functioning of insolvent banks and bankrupt governments), in others words, a necessary condition of the movement of capital.

It is the fundamental situation that produced the financial crisis (2008), and the stop gap efforts (great bank bailouts, quantitative easing, nascent attempts to institute cashlessness in society, zero and negative interests), none of which has launched a new historical cycle of accumulation, to keep the system afloat. Today a shift toward protectionism at a national level and on a global scale, with the accompanying xenophobia and nationalism, is underway, replacing the failed Keynesian panaceas. As the capitalist world (i.e, the world as a whole) totters on the cusp of a return to an open (general) crisis, *at the level of state policy this shift is a clear indication of the drift toward renewed imperialist world war.*

Imperialist appetites are motivated and directly driven by the requirements of the expanded reproduction of capitalism as a system of social relations, and further constrained by stagnate or declining rates of profit, excess capacity and overproduction within that system, to pursue at whatever costs seizing surpluses as they circulate internationally. At the same time, these requirements (of expanded reproduction) take the form of a political struggle

Even before China entered the field the shift in the site of production was a global phenomenon: German auto manufacturer is conducted as much in the German East and the Czech Republic as Bavaria; Japanese electronic components are produced in Malaysia and Thailand in as great a quantity as in Honshū.

⁴³²Among the gigantic open-hearth (or even oxygen) furnace based mills in Gary or Pittsburgh, some 400,000 jobs vanished just in the 1970s, a free fall in which an industry of 600,000 was reduced to 235,000 workers. (Today, the remaining integrated oxygen furnace mills employ maybe 40,000 workers, while some 200 minimills might employ another 35,000-40,000.) Whether it is the coalfields of West Virginia, the slaughterhouses of Iowa, tire factories in Decatur (Illinois), Akron (Ohio) or Nashville, auto assembly factories in Detroit, Toledo, Kenosha (Wisconsin) and a dozen other facilities, among auto related manufacturing plants such as in Milwaukee (A.O. Smith producing auto and truck frames) or Kettering (Ohio, where Delco produced batteries and engine components), or consumer durables in Dayton (Westinghouse manufacturing washing machines and dryers), these plants and factories no longer exist or, if they do, form merely skeletal outlines of their former shapes and sizes. In 1970, there were over 750,000 workers employed in auto. By 2011, the combined workforces of Ford, General Motors and Chrysler were not as large as that which labored at the Ford River Rouge plant, over 100,000, circa 1930. As late as 1967, the United Rubber Workers boasted 167,500 union members. Today, the URW has long been absorbed into the United Steel Workers, and the USW Goodyear component amounts to 15,000 union workers at twelve plants in the United States and four in Canada. Then there is (was) US furniture manufacture. Between 1990 and 2005, it too collapsed. And the list goes on, and on.

among states for markets and resources spurred on by a pace of resource consumption (and consequent ecological destruction) that is rapidly outstripping technical innovation requisite to the creation of a new order of raw materials from diminishing (largely hydrocarbon) resource bases, but by states whose actions are inextricably, indistinguishable and immediately determined by geopolitical and ideological objectives....

The shifting structure of the world capitalist economy, in particular the growing weight of China in it, has yet to witness the development of a Chinese (or Chinese-Russia) alternative to the dollar-denominated, US hegemonized global currency system, and it is quite possible that it will not for the foreseeable future; that conflicts between rival imperialist powers, above all the United States and an ascending China, within the context of a stagnating, and a critical moments contracting, global economy, will not in the near future issue in increasingly militarized struggle that devolves into interimperialist war, into world war, but will instead be *temporarily* resolved through a slump, or a series of slumps inclusive of financial crisis which adequately devalorizes enough capital, especially fixed capital, to renew accumulation, though it will *not* sustain it. The greater the extent of that devalorization (and, thus, the greater the economic expansion which followed), the more US hegemonic power will be degraded. To be sure, this is entirely premised on the assumption that only a weak, or even non-existent proletarian challenge within the US will form under these conditions.

Driven by a slowly dissolving global hegemony, or alternately by global contraction (or both), and greatly exacerbated by acceleration of an abruptly changing climate, a nationalist party in political power somewhere in the world will desperately seek diversions. Why wouldn't we think that of all the possibilities it appears most likely that this party will hold power in the United States? Even by great power imperialist standards, it is a rogue state: In the era of American decline, we have seen the US state set up a worldwide gulag for extra-legal detention and torture; pursue drone assassinations by profiling suspected "terrorists" which means acts of murder aims at a type, usually inclusive of a family, not a specifically identified individual, and fund and arm *jihadists* to fight its regime change wars (Afghanistan, Libya, Syria); enact legislation to provide meaningless legitimacy for sanctions (Russia); tear up a treaty which even its own people say is being scrupulously observed (Iran) and, engage in legally warranted kidnapping as part of trade policy (a Chinese national in Canada). This nationalist party will desperately seek diversions, perhaps a little war here or there, an action easily and triumphantly managed. Maybe, but then maybe not...

Yet *absent a coherent, sustained proletarian opposition* (which today rests solely on the emergence and constitution of youthful working class driven by sensibilities that embrace equality, tolerance and ecological sensitivity), the current, or contemporary, configuration of imperialist power that the United States dominates cannot and will not be overturned short of another wrenching struggle involving, among other features, the employment of biological, chemical or nuclear weaponry, any or all, in imperialist world war.

Conditions for renewal world war have increasingly come together in the very dynamics of capitalist development on a world scale. They include the reemergence of competing imperialist powers on the basis of technologically advanced industrial bases, i.e., Germany and Japan, dating from the middle to late 1960s, and, consequently, the increasingly frantic and frenzied pace as which capital's techno-science shapes, reorganizes and restructures production, in which productivity has become so gargantuan that it continuously threatens to explosively escape the value form in which it must be capitalistically expressed, paralyzing the system of social relations; the collapse of Soviet Union, unraveling the military alliances that suppressed competition and restricted dynamism and technical innovation largely to the armaments sector; the shift of industrial production to East Asia and the tendential formation of two poles of economic activity in world capitalist system of social relations, the dynamic industrial East Asia and the rentier economies of the old capitalist metropolises in North America and Europe, creating China as a capitalist and rival imperialist power (possessed of the largest *industrial* economy in the world) and reinvigorating once Soviet, now Russian imperialism with its large oil and natural gas resources on the basis of a growing significance of hydrocarbons in imperialist jockeying and rivalry; and, on this basis, the emergence of rival imperialist foci of world accumulation, consisting in a new center that lay along the East Asian industrial arc, situated on a line that runs from Shenzhen in the south to Shanghai in the north. It is this new center of capital accumulation at the level of the world that is at the vortex of interimperialist rivalry.

The potentiality for conflict, hence the *drift toward renewed imperialist world war is intensified, exacerbated and mediated by two conditions of capitalist development that did not obtain, nay did not exist, during the (last) general crisis of capitalism, in particular during both of the two imperialist world wars*: The first is the simply astounding productivity of abstract labor which reduces turnover times and the period of a developmental cycle, that within each cycle voraciously consumes resources at a pace which rapidly outstrips the rate of technical innovation required to shift the earthly resource base away from hydrocarbon fossil fuels and create a new order of raw materials on which the entirety of capitalist development can rest (for without accelerated innovation the prospects of a runaway planetary warming loom). And, thus, the second, product of whole history of capitalism once established on its own basis (real domination), is the very facticity and then the extraordinarily rapidity (historically as well as geologically) of *an abruptly changing global climate*: Such renders access to resources more difficult, interrupts and makes production of agricultural foodstuffs and industrial raw materials less dependable, places more demands on the state-

funded, infrastructural foundations of capitalism which capital's movement requires (and further requires renewing and expanding), produces societal dislocations, supply chain disruptions and shortages (above all, in food), and narrows the basis in earthly nature for human activity in its socio-historically specific, capitalist form. *All these problems are qualitative, and rapid climate transformation, utterly novel and unprecedented,* is transforming all the rest, heightening interimperialist rivalries, tensions and struggle.

Yet in the end, the direction of capitalism remains tendential; it is not fated (although what change may come may come too late): *The historical present in its facticity is not "real movement," rather it, that movement, is not a fanciful alternative but is the immanent potential incarnate in a social class stratum (a youthful, immiserated proletariat) for historically effective action that mounts a genuine challenge to capital; taken together those determinants, which include interimperialist rivalry, an abruptly changing climate and whatever horrors lie beyond them, will form the contours of the tendential direction within which "real movement" occurs and the realities it must confront:*

Revolutionary social change the aim of which is communist (in the communiseur's sense) cannot be written off; for, in point of fact, it is coming and it will happen. But it will transpire within the context of those massive dislocations, disruptions and supply shortages already mentioned, within the context of accelerated plundering of humanly formed nature already mentioned, within the context of exponentially worsening change of climate, already mentioned, in which daily living is increasingly suffocated by haze, stench, smog and carcinogenic particulates we breathe, and hazardous and toxic wastes poisoning land, air and water. That transformation will not only occur within these interrelated contexts but be shaped and often driven by them. It will not generate councils (soviets), and, emphatically, it will not constitute a global council (much less a mass revolutionary party) to steer a course through the twists, turns and turmoil of revolutionary transformation. As it has been for over a nearly a decade and a half, the riot, an immediate expression of precarity's revolt, will continue to be a decided feature of this broad change, as will horizontal organization and local action - except that localities will be everywhere, global, i.e., characteristically there will be global simultaneity of local action. It will be messy and chaotic, convulsed by strikes for wages, actions against supervisors, refusals to return to work, refusals to work, for a return to democratic norms in the state, against the regime in power, some against the state itself, and antiwar strikes since renewed imperialist world war in some form will be unavoidable. It will feature vicious repression and large massacres carried by states' forces of repression, this reaching forward to sporadic civil war. The great imperialist powers will be destroyed in the process, or at least "downsized" to such an extent that their major focus will be compelling labor, maybe slave labor, to produce agricultural surpluses. (Perhaps in the interstices of territorial states, small egalitarian communities may arise, perhaps a federation of some here and there. Perhaps not.) In the end, though, against the climate transformation which the civilization of capital has unleashed, it will be preserving human life itself (either as labor-power or slave labor) which will occupy states as that abruptly, and radically, changing climate destroys dense human populations.

In that end, we are dubious that a revolutionary transformation will have an Earth which will sustain (it certainly won't nourish) larger scale, organized societies; for us, it is an open question whether that Earth will sustain human social life in any currently recognized form.

A rupture in the continuum of history may well be forthcoming, but immanent to history that rupture is not likely to burst forth from it; rather, it is the otherness and difference, nature (that is the limited expression of *natur naturans* we call earthly nature) which, inseparably intertwined with that (our) history, its ultimate and final premise, from which this rupture is likely to erupt: It is renewed imperialist world war set down in the context of a geologically unexampled ongoing mass species extinction, the unraveling of complex, intricate global ecology and a cataclysmic transformation of climate, all originally driven by the logic and movement of capital, which will generate that rupture. (In "metabolically healthy" forms, all these are real, natural premises of man as a being in nature, of human life on Earth. Yet it is precisely the movement of capital implicating itself in that ecology which is unraveling and destroying it, extinguishing species and radically transforming climate, all interconnected.) This rupture may compel a further explosive break, the lineaments of a revolutionary transformation, but it may well, as we have indicated elsewhere,⁴³³ come too late.

A complete analysis aimed at comprehending these developments would force us to work through contemporary "revolutionary" (i.e., productivist) theorizations, demonstrating they offer merely a technocratic rationalization of capitalism. It compelled us to reexamine our fundamental point of departure in Hegel and Marx, as well as the meaning of communism; we also found ourselves required rethink the question of agency through a historical account of proletarian activity in the metropolitan citadel of capitalism in the short twentieth century.⁴³⁴ In the end, it necessitated a return to Marx's critique of political economy. In working through the three volumes of *Capital*, we did so only with respect to those aspects of his analyses which, deep into the epoch of real domination, conceptually reproduce the intelligible structure of capitalism as a social formation that today embraces all reality.

Within the framework of a theory of the rupture, there are two major problematics in *Capital*. The first is that of human freedom, taking its point of departure in abolishing the state; the second is that of our relation, as humans, to the nature from which we arose and in which we are embedded. The first Marx does simply does not address; the second, he did so inadequately and wrongheadedly. In confronting these problematics, we have been compelled to travel down paths Marx did not go, explicating assumptions that, in his time unwarranted, are in our time unjustified and unsustainable.⁴³⁵

What emerges in our analyses is that immanent to these unwarranted, unsupportable *assumptions* is a certain logic: Where foundations are required (and achieved only reflexivity, that is, by working through them, not merely positing them), they are absent; where they are not required, they are present as hypostatizations. In the former case, *there is no analysis which intimately and necessarily links the societally specific exploitation of abstract labor to the domination of nature*. In the latter, *a historically specific configuration of productive forces underpins the theory of consciousness of class*.⁴³⁶

While retaining the categorial framework of *Capital* worked out in its immanent analysis, we are thus required to abandon the premises appearing in the footnote above (n. 438). On assumptions of the ontology of labor and a physicalist metaphysics (and with it, the modern science of nature), the awe and respect which Marx viewed technological prowess exhibited in nature conquest, and the necessity of realizing communism on the basis of that conquest (alleviating material scarcity grounded in social inequality, that is, in class society), cannot be transcended.

Theoretically mediating a practice which confronts and surpasses, if any longer at all possible, the existential threats to life on Earth (and not just human life), and the inimical, suffocating relation of statism to freedom, which capital has induced and is accelerating *requires* a "return to foundations," i.e., an evolutionary account of the origins and early development man as man, of her emergence as a distinctive being in nature. This entails further discussion of the significance of ideational features of human activity, features which are aspects of a complex of characteristics which

⁴³³ *Capitalism and the Domination of Nature*, Conclusion.

⁴³⁴ See, respectively, *Productivism and the Metaphysics of Negentropy and Expanded Reproduction: A Modest Contribution to the Critique of Presuppositions, Contents and Method* in Lyn Marcus' *Dialectical Economics* (St. Paul, Dec 2011-Jan 2012); Hegel-Marx, Marx-Hegel: Brief Remarks on the Materialist Reading of Hegel (St. Paul, Jan 2012); *Communism* (St. Paul, Aug-Oct 2008); and consciousness of Class (St. Paul, Mar 2009), Part I ("Consciousness of Class, Class Vanguards and Productivism.")

⁴³⁵ Most important among these are the significance of feudalism for capitalism at its origins, having little to none; the nature of antediluvian forms of capital, specifically merchant's capital in the run up to capitalism; a stagist metaphysics of history; the untenable ontologies of labor and the physicalistic object *qua* body; the *faux* identification of tendency with law; and a formalistic concept of banking which overcomes the private character of capital.

There are still other premises of Marx's analyses. Still functioning as unevicenced assumptions, they are equally important failures and are in our time far more pernicious. Among these the following simply escaped him: The centrality of Quiritarian legality not just for its rise but to capitalism as a social formation as such; the historicity of the central categories of the analysis of the logic and movement of capital; the confusion of *Wissenschaft* in Hegel's sense with the modern science of nature, the latter as a class-based and -driven form of knowing, as bourgeois theory, and, against the evidence of some of his own analyses, the decidedly determinant nature of scientific inputs for the irreversibility of the real subsumption of labor under capital.

⁴³⁶ See the discussion in the Prologue, fn. 29, above.

define man as that distinctive being in nature⁴³⁷... In this context and following upon its examination of archaic communities,⁴³⁸ theoretical mediation of revolutionary practice requires abandonment of labor as essential, necessary determinant of the reality and being of man herself; it requires recognizing that all institutions of the state, not just repressive but administrative, financial and welfare, oppress, enslave, and secure and maintain exploitation; it requires forgoing the overcoming of socially mediated, material scarcity by way of nature domination, i.e., it demands abandoning capitalist civilization, today synonymous with statism, with its insatiable consumption of earthly nature in pursuit of the mirage of technologically manufactured commodity abundance - the product of a separate technology aimed at the conquest of nature and resting on the modern science of nature all of which we shall be compelled to relinquish, none of which are the road to networks of free communities (communism) but which lead only to the deepening of the stranglehold of capital and its state over life, over all being and existence with an earthly basis.

⁴³⁷Thus, *The Materialist Dialectic. Why the Study of Human Origins is Necessary and Why it is Indispensable to the Critique of Science and Inseparably that of Capital.*

⁴³⁸Thus, *Archaic Communities and the Origins of Agriculture.*